



Weston Solutions, Inc.
4710-A Interstate Drive
Cincinnati, OH 45246
513-860-9102 • Fax 513-860-9105
www.westonsolutions.com

933448

May 13, 2013

Ms. Shelly Lam
On-Scene Coordinator
Emergency Response Branch
U.S. Environmental Protection Agency, Region 5
2525 North Shadeland Avenue, Suite 100
Indianapolis, IN 46219

**Subject: Final Letter Report
Crown Laundry Site - Removal Action
Indianapolis, Marion County, Indiana
Technical Direction Document No.: S05-0001-1101-028
Document Control No.: 1369-2A-AWQD
Contract No.: EP-S5-06-04**

Dear Ms. Lam:

The Weston Solutions, Inc. (WESTON®), Superfund Technical Assessment and Response Team (START) prepared this letter report in accordance with the requirements of Technical Direction Document (TDD) No. S05-0001-1101-028, which the U.S. Environmental Protection Agency assigned to WESTON START. The scope of this TDD was to support and oversee a time-critical removal action at the Crown Laundry Site located at 2913 East Washington Street in Indianapolis, Marion County, Indiana (the Site). The removal action involved emergency stabilization and removal activities and time-critical removal activities that included air monitoring; removal of 14 underground storage tanks (UST) and one concrete vault; removal of tires and compressed gas containers; investigation, excavation, and off-site disposal of 13,581 tons of volatile organic compound (VOC)-contaminated soil; a vapor intrusion investigation; and installation of 11 sub-slab depressurization systems (SSDs) and proficiency air sampling after installation of the SSDs.

This letter report discusses the Site description, Site history, emergency stabilization and removal activities, time-critical removal activities, and vapor intrusion investigation activities. **Attachments A and B**, respectively, provide the figures and tables for this letter report. **Attachment C** provides photographic documentation of Site conditions and the removal action activities. **Attachment D** provides the pollution reports (POLREP) associated with the removal action.

SITE DESCRIPTION

The Site is located at 2913 East Washington Street, Indianapolis, Marion County, Indiana (**Figure 1 in Attachment A**). The Site's geographical coordinates are 39° 46' 05.8944" North latitude and 86° 06' 53.5608" West longitude. The Site occupies approximately 2.7 acres and currently is vacant. The Site formerly contained two commercial/industrial buildings that were



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demolished in the spring of 2011. The Site is situated in a mixed commercial and residential area approximately 1.5 miles east of downtown Indianapolis. The Site is bordered to the north by East Washington Street; to the west by South Oxford Street, with a residential area beyond; to the south by a residential area and a sheet metal manufacturing facility owned by Abell Engineering & Manufacturing; and to the east by vacant commercial buildings and an asphalt parking lot. **Figure 2 in Attachment A** shows the Site layout. Residential areas are located adjacent to the southern property boundary and within 60 feet from the western property boundary.

SITE HISTORY

From 1910 to 1975, the Site was the location of a commercial dry cleaning facility operated by the Crown Laundry & Dry Cleaning Company. The facility cleaned industrial rugs. Based on the dates of operation, Stoddard or chlorinated solvents most likely were used in the cleaning process.

From 1975 until 2006, portions of the Site were used as the following: a distribution facility for an electronic company operated by Radio Corporation of America, commercial/storefront space, a shop operated by Inland Machinery and Electronics, and an un-named vehicle repair shop. From 2006 through 2009, Aztec Group, Incorporated, occupied the Site.

Previous environmental investigations conducted at the Site have identified halogenated VOCs, petroleum hydrocarbons, and heavy metals in on-site soil and groundwater. Free product and the following VOCs have been identified in groundwater: carbon tetrachloride; 1,2-dichloroethane; cis-1,2-dichloroethene (DCE); trans-1,2-DCE; tetrachloroethene (PCE); and trichloroethene (TCE). In addition, USTs and numerous abandoned drums and containers of unidentified substances have been documented at the Site.

On September 23, 2010, the Indiana Department of Environmental Management (IDEM) requested EPA assistance in assessing and mitigating the potential for imminent and substantial threats to the public health or welfare of the United States or the environment posed by Site-related conditions. IDEM also noted the potential for vapor intrusion to adjacent residential properties of elevated concentrations of VOCs observed in on-site soil and groundwater.

On October 11, 2010, EPA and WESTON START conducted a site assessment to document current Site conditions and evaluate the Site for a potential time-critical removal action. The site assessment documented that the Site was abandoned and that access to the Site was unrestricted (evidence of trespassing was observed). EPA observed and documented the presence of approximately 20 drums, hundreds of smaller containers (having a volume of 5 gallons or less), and one UST. During the site assessment, eight liquid waste samples were collected from seven drums and containers and one UST at the Site. Based on sample analytical and field screening results, the drums and containers contained ignitable wastes.



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Based on analytical results and Site conditions observed during the site assessment, the Site met six criteria for a removal action pursuant to Title 40 of the *Code of Federal Regulations*, Part 300.415(b)(2). Therefore, the Site posed an imminent and substantial threat to the public health or welfare of the United States or the environment.

After the site assessment, EPA determined that there was an immediate threat of fire or explosion from liquid materials in drums and other containers observed during the site assessment. Therefore, EPA mobilized the Emergency Rapid Response Services (ERRS) contractor to conduct emergency stabilization and removal activities at the Site as discussed below.

REMOVAL ACTION

The removal action consisted of emergency stabilization and removal activities and time-critical removal activities as discussed below. **Attachment C** provides photographic documentation of Site conditions and the removal action activities. **Attachment D** provides the POLREPs associated with the removal action.

EMERGENCY STABILIZATION AND REMOVAL ACTIVITIES

On October 13, 2010, EPA, WESTON START, and ERRS contractor Environmental Quality Management (EQM) mobilized to the Site to stabilize, sample, and dispose of containerized wastes identified during the site assessment.

The drums and containers were collected, staged, and secured within a room in one of the buildings formerly located on Site. The windows and doors of the room were boarded up to prevent access, and a security guard was contracted to oversee the security of the stabilized drums and containers. EPA observed drums and containers labeled as flammable, corrosive, ammonia, flammable paint, latex paint, cylinders, aerosol cans, and universal waste (batteries and fluorescent bulbs).

On October 14, 2010, the ERRS contractor field screened, hazard categorized, and bulked the contents of the abandoned drums and containers according to their waste characteristics. Five disposal samples were composited and sent for waste disposal analysis.

On October 22, 2010, the drums and containers were shipped for off-site disposal to Environmental Quality (EQ) in Detroit, Michigan. **Table 1** in **Attachment B** summarizes the wastes removed from the Site during the emergency stabilization and removal activities.

TIME-CRITICAL REMOVAL ACTIVITIES

On December 17, 2010, the EPA Superfund Division Director signed an action memorandum approving funding for the time-critical removal action at the Site.

On April 4, 2011, EPA, WESTON START, and the ERRS contractor remobilized to the Site to



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conduct the time-critical removal action. Before on-site removal activities began, an incident command post and site security were established; a site-specific Health and Safety Plan (HASP) that included an Air Monitoring Plan and an Emergency Contingency Plan were developed and implemented; and a detailed work plan was prepared so that the ERRS contractor could execute the project in the most effective, efficient, and safe manner.

From April 4 through June 23, 2011, the following time-critical removal activities were conducted:

- Air monitoring
- Removal and disposal of the contents within 14 USTs and one concrete vault
- Removal and disposal of tires and compressed gas containers
- Disposed of 2,300 gallons of flammable (solvent) liquid, 6,998 gallons of solvent-contaminated water and 5,620 gallons of non-hazardous wastewater
- Investigation of the extent of on-site VOC-contaminated soil
- Excavation and off-site disposal of 13,581 tons of VOC-contaminated soil
- Post-excavation soil sampling
- Vapor intrusion investigation
- Installation of SSDSs at 11 residential properties and proficiency air sampling to ensure that the SSDSs were operating effectively

Each removal action activity is discussed below.

Air Monitoring

WESTON START conducted air monitoring for particulates and VOCs within the Site perimeter during removal activities. Air monitoring was conducted for worker and also public breathing zone air safety. Particulate levels were monitored using a DataRAM. If particulate levels within the work zone exceeded the action level of 1.0 milligram per cubic meter (mg/m^3), work activities were suspended and engineering controls were implemented to reduce particulate levels to below the action level. During removal activities, EPA and WESTON START did not observe any air monitoring particulate levels that exceeded the action level.

WESTON START used an AreaRAE network to conduct routine VOC air monitoring of breathing zone air and at the Site perimeter. If the AreaRAE had a sustained VOC reading greater than 1 part per million (ppm) at the Site perimeter, activities were suspended and engineering controls were considered to reduce the VOC levels in the work zone or at the Site perimeter. During removal activities, EPA and WESTON START did not observe any VOC levels exceeding the action level.



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UST and Concrete Vault Removal and Waste Disposal

During the removal action, in addition to the 1 UST observed during the site assessment, EPA discovered another 13 USTs and 1 subsurface concrete vault at the Site. **Figure 3** in **Attachment A** shows the locations of the USTs and concrete vault. The ERRS contractor sampled and determined the hazardous characteristics of any remaining product within the USTs and vault before removal and off-site disposal. **Table 2** in **Attachment B** summarizes the volume and contents of each UST and the concrete vault. A total of 5,620 gallons of non-hazardous wastewater from the vault was disposed of at Clean Waters LTD of Dayton, Ohio. In addition, 2,300 gallons of solvent liquid from the USTs was disposed of at PSC of Detroit, Michigan, and 6,998 gallons of solvent-contaminated water from the USTs was disposed of at Clean Waters LTD of Dayton, Ohio (**Table 1** in **Attachment B**).

After each UST was emptied, the ERRS contractor excavated the UST and then cut holes into it to render it useless. The USTs were shipped to Omni Source in Indianapolis, Indiana, for recycling. A total of 19.99 tons of metal was recycled from the USTs. Tires and compressed gas containers (aerosol paints, fire extinguisher, acetylene and 1,1,1,2-tetrafluoroethane) were disposed at EQ of Detroit Michigan (**Table 1** in **Attachment B**).

VOC-Contaminated Soil Investigation

From April 5 through 8, 2011, activities focused on investigating the horizontal and vertical extent of VOC-contaminated on-site soil. The soil investigation was performed using a Geoprobe[®] unit and the direct-push method. The Geoprobe[®] advanced borings at the 37 locations shown in **Figure 4** in **Attachment A**. In general, each soil boring was advanced to 20 feet below ground surface (bgs) in four 5-foot-long interval sections. At each 5-foot-long interval section, the soil boring was examined for soil type, odors, and visual impacts. The soil boring was screened for VOCs using a MultiRAE Plus photoionization detector (PID) with a 10.6-electrovolt lamp. The decision to collect a composite sample for laboratory analysis was based on the following three primary factors:

- Hydrocarbon staining in the boring
- Hydrocarbon odor in any 5-foot-long section
- PID VOC reading exceeding 5 ppm

A total of 45 soil samples were collected from the cores from the 37 soil boring locations. The soil samples were submitted to Microbac Laboratory in Merrillville, Indiana, for total VOC analysis. The sample results were compared to IDEM's 2009 Risk Integrated System of Closure (RISC) screening levels for residential and industrial properties.

Table 3 in **Attachment B** summarizes the sampling results. Soil samples collected from various depths from the following boring locations contained VOCs at concentrations exceeding IDEM's



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RISC levels for residential or industrial properties: S04, S12, S19, S22, S23, S32, S33, and S35.. The chemicals of concern at the site include 1,1-DCE; benzene; cis-1,2 DCE; PCE; TCE; and vinyl chloride.

VOC-Contaminated Soil Excavation and Disposal

Based on the soil sampling analytical results, excavation was conducted to remove and properly dispose of VOC-contaminated soil at the Site. The ERRS contractor excavated and stockpiled the VOC-contaminated soil before loading it onto trucks for off-site disposal. During non-working hours, contaminated soil stockpiles were covered with plastic sheeting. Total excavation depths ranged from 4 to 23 feet bgs. **Figure 5 in Attachment A** shows the on-site area where excavation activities were completed.

On June 23, 2011, excavation activities were completed and clean backfill was used to fill in the excavation areas back to grade. A total of 13,581 tons of VOC-contaminated soil was excavated and disposed at the Twin Bridges Landfill in Danville, Indiana (**Table 1 in Attachment B**).

Post-Excavation Soil Sampling

To determine if excavation activities were completed in an area, WESTON START collected a sample from the base of each excavation area and field screened the sample with a PID using the headspace technique. The headspace technique was accomplished by collecting approximately 2 ounces of soil from the excavation and placing the soil in a clean glass jar. The soil was allowed to warm up for approximately 10 to 20 minutes. Then the probe intake from the PID was inserted into the headspace of the jar. If the VOC result exceeded 5 ppm, additional excavation activities continued in that area. If the VOC result was less than 5 ppm, a post-excavation soil sample was collected to confirm that RISC cleanup levels had been achieved. **Table 4 in Attachment B** summarizes the post-excavation soil sampling results.

Vapor Intrusion Investigation

From February 22 through May 25, 2011, WESTON START conducted a vapor intrusion investigation that involved sampling at 16 residential properties. WESTON START installed vapor probes and collected sub-slab and indoor air samples from the residential properties to determine if vapors from VOC-contaminated groundwater were migrating through soil and into occupied residential properties, posing a threat to human health. **Figure 6 in Attachment A** shows the residential properties sampled for vapor intrusion.

The vapor probes for the sub-slab air samples were installed and the samples collected in accordance with the "Standard Operating Procedures for the Construction and Installation of Permanent Sub-Slab Soil Gas Wells, #2082," (SOP No. 2082) dated March 29, 2007, under the EPA Response Engineering and Analytical Contract.

The sub-slab vapor probes were installed in residences having basements with concrete slab



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floors. All sub-slab and indoor air samples were collected using pre-cleaned, laboratory-supplied, 6-liter SUMMA canisters. The SUMMA canisters were fitted with flow regulators to allow sample collection over a 24-hour period and were connected to the stainless-steel probes with Teflon tubing. The indoor air samples were collected from each residence at a height of 2 to 3 feet above the floor of the basement over a 24-hour period.

The sub-slab and indoor air samples were submitted under chain of custody to MicroBac Laboratories in Merrillville, Indiana, or ALS Environmental Laboratories in Cincinnati, Ohio, for VOC analysis using EPA Method TO-15.

The sampling results were compared to the sub-slab and indoor air screening levels established by the Agency for Toxic Substances and Disease Registry (ATSDR). **Table 5** in **Attachment B** summarizes the vapor intrusion sampling results.

SSDS Installation and Proficiency Air Sampling

Based on the vapor intrusion sampling results, sub-slab or indoor air VOC concentrations at 12 residential properties exceeded the ATSDR screening levels and the vapor intrusion pathway was completed, indicating that vapor intrusion was potentially occurring. The following 11 residential properties allowed EPA access to install a SSDS:

n	non responsive		

Figure 6 in **Attachment A** shows the locations of the residential properties where SSDSs were installed. After the SSDSs were installed, WESTON START collected proficiency air samples to document that the SSDSs were reducing indoor air VOC concentrations to below the ATSDR screening levels. **Table 5** in **Attachment B** summarizes the proficiency air sampling results.

SUMMARY

On October 11, 2010, EPA conducted a site assessment and evaluated the Site for a time-critical removal action. Based on sample analytical and field screening results for samples collected during the site assessment, drums and containers at the Site contained ignitable wastes.

From October 13 through 22, 2010, EPA conducted emergency stabilization and removal



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activities to characterize and transport for off-site disposal drums and containers of hazardous waste.

On December 17, 2010, the EPA Superfund Division Director signed an action memorandum approving funding for the time-critical removal action at the Site.

Before on-site removal activities began, an incident command post and site security were established; a site-specific HASP that included an Air Monitoring Plan and an Emergency Contingency Plan were developed and implemented; and a detailed work plan was prepared.

From April 4 through June 23, 2011, the following time-critical removal activities were conducted:

- Air monitoring
- Removal and disposal of the contents within 14 USTs and one concrete vault
- Removal and disposal of tires and compressed gas containers
- Disposal of non-hazardous wastewater, flammable (solvent) liquid, and solvent-contaminated water
- Investigation of the extent of on-site VOC-contaminated soil
- Excavation and off-site disposal of 13,581 tons of VOC-contaminated soil
- Post-excavation soil sampling
- Vapor intrusion investigation
- Installation of SSDSs at 11 residential properties and proficiency air sampling to ensure that the SSDSs were operating effectively

On-site removal activities were performed and completed by the EPA ERRS contractor, EQM. The ERRS contractor provided labor, analytical services, Site security, and off-site transportation and disposal of wastes from the Site. **Table 1** in **Attachment B** summarizes the wastes disposed of during the removal action.

During the removal action, WESTON START reviewed the HASP; prepared the Air Monitoring Plan, Emergency Contingency Plan, and a Quality Assurance Project Plan; provided technical assistance; conducted perimeter air monitoring, vapor intrusion air sampling, soil sampling, and post-excavation sampling; and provided administrative support and Site written and photographic documentation (**Attachment C**).

Throughout the removal action, OSC Lam produced 10 POLREPs to communicate the progress of the removal action. The final POLREP was finalized by EPA, posted on the <http://epaosc.org/> website, and distributed to federal, state, and local representatives on June 29, 2011.



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Attachment D provides a copy of each POLREP.

This letter report serves as the final deliverable for this TDD. WESTON START anticipates no further activities under this TDD. If you have any questions or comments regarding this report or require additional copies, please contact me at (618) 922-9985 or Randy Kirkland at (937) 602-3089.

Sincerely,

WESTON SOLUTIONS, INC.

A handwritten signature in blue ink that reads "Keith Hughes".

Keith Hughes
WESTON START Project Leader

A handwritten signature in blue ink that reads "Randy Kirkland".

Randy Kirkland
WESTON START Project Manager

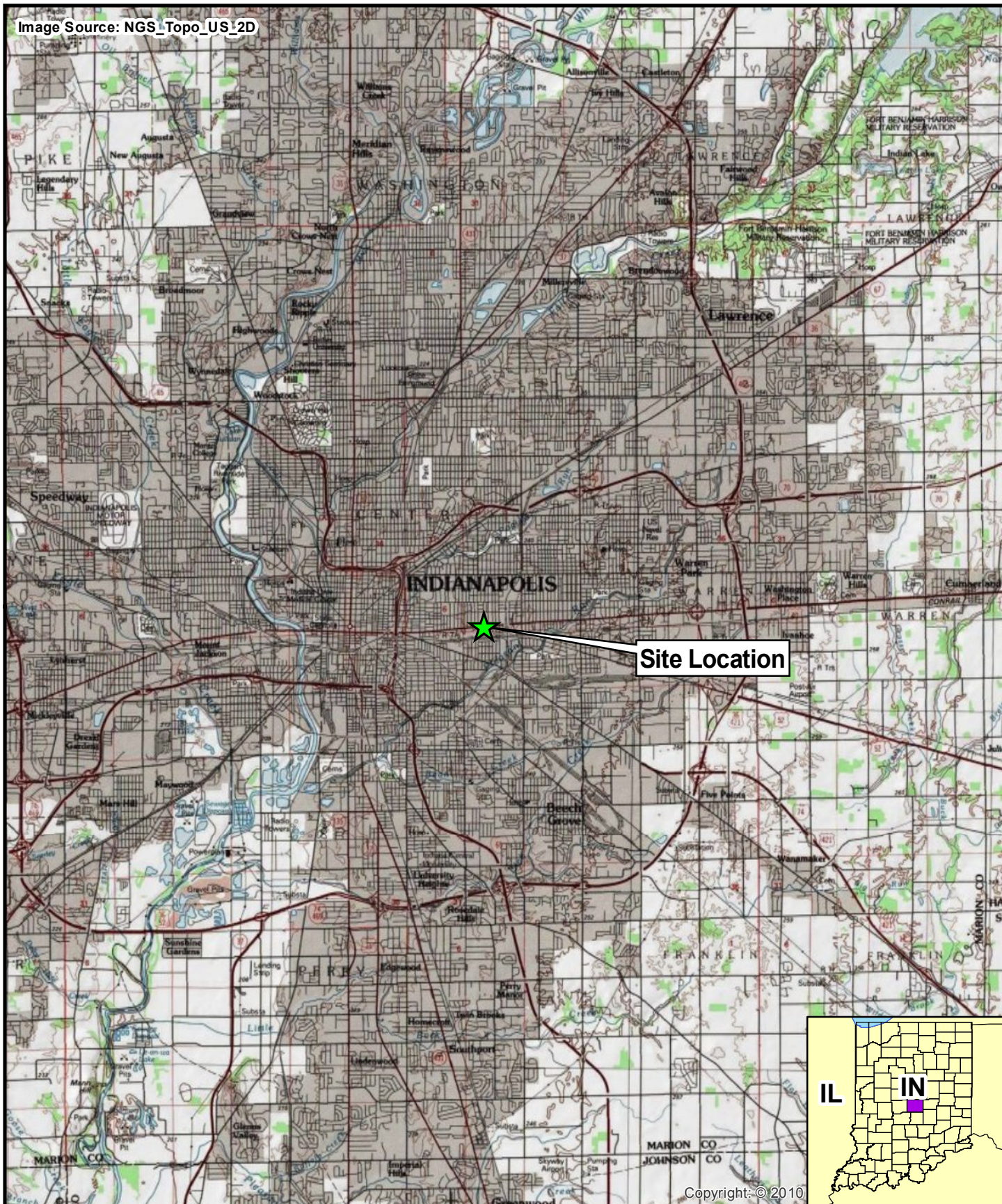
Attachments:

- A – Figures
- B – Tables
- C – Photographic Documentation
- D – POLREPs

cc: EPA Records Center
WESTON START DCN File

ATTACHMENT A
FIGURES

Image Source: NGS_Topo_US_2D



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TDD: S05-0001-1101-028
DCN: 1369-2A-AWQD



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Figure 1

Site Location Map
Crown Laundry Site
Indianapolis, Marion County, Indiana



Legend

 Site Boundary

0 100 Feet



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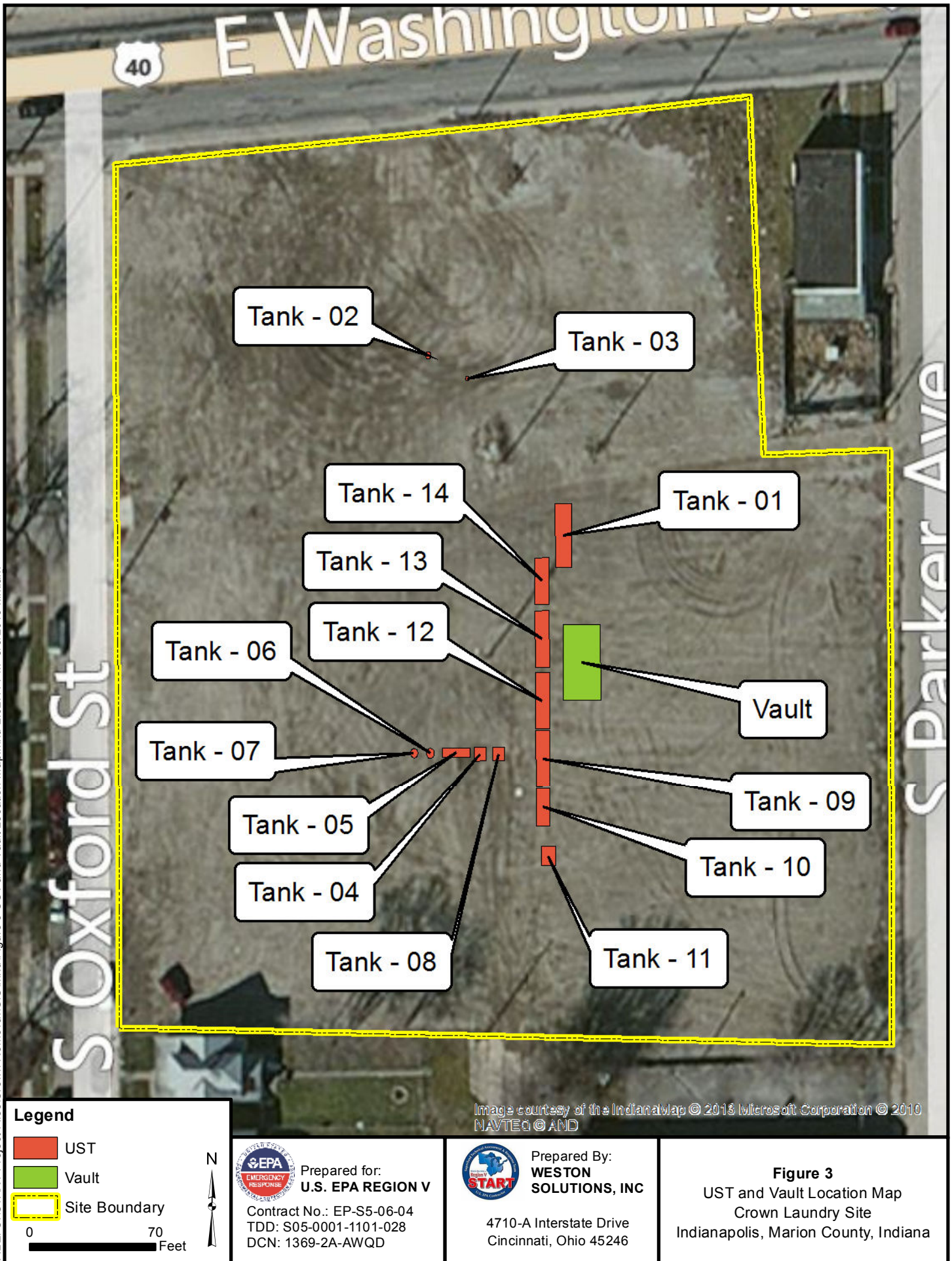
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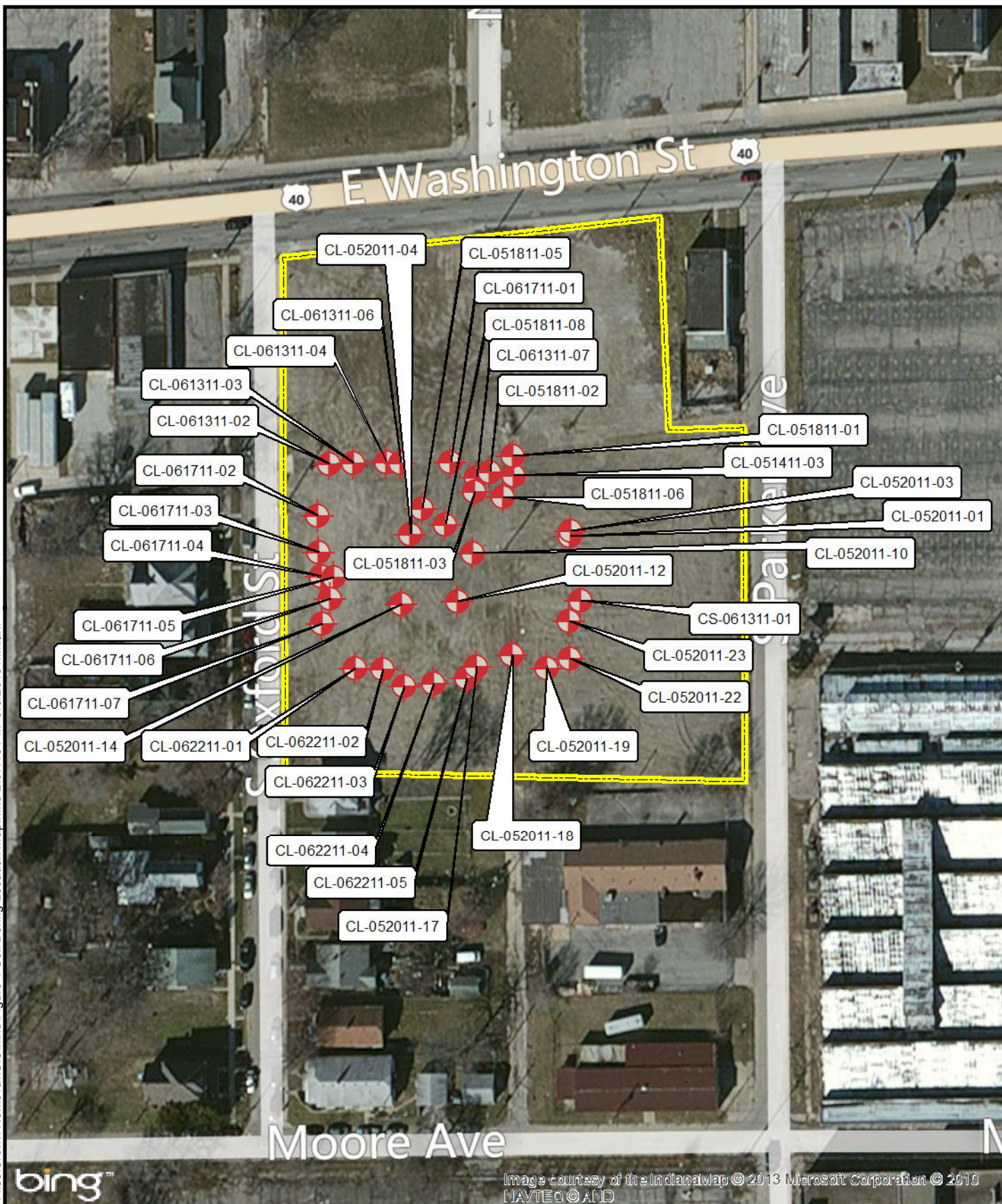


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4710-A Interstate Drive
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Figure 2
Site Layout Map
Crown Laundry Site
Indianapolis, Marion County, Indiana





Legend

Site Boundary

Soil Boring

0 125 Feet



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Figure 4

Soil Boring Location Map
Crown Laundry Site
Indianapolis, Marion County, Indiana



Legend

-  Excavation Area
-  Site Boundary

0 70 Feet



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Figure 5
Area of Excavation Map
Crown Laundry Site
Indianapolis, Marion County, Indiana

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ATTACHMENT B
TABLES

TABLE 1
WASTE DISPOSAL SUMMARY TABLE
CROWN LAUNDRY SITE
INDIANAPOLIS, MARION COUNTY, INDIANA

Waste Stream	Medium	Quantity	Disposal Facility
Hazardous waste solid (PCE and lead)	Solid	1 55-gallon drum	EQ Detroit, Michigan
Fire extinguisher	Gas	1 cylinder	
Hazardous waste liquid (vinyl chloride and lead)	Liquid	6 55-gallon drums	
Flammable liquid (benzene and ethylbenzene)	Liquid	13 55-gallon drums	
Acetylene	Gas	1 cylinder	
Waste aerosols	Gas	1 55-gallon drum	
Concrete grout	Solid	2 55-gallon drums	
1,1,1,2-Tetrafluoroethane	Gas	3 cylinders	
Ammonia	Liquid	1 gallon	
Waste corrosive liquid (hydrochloric acid)	Liquid	1 gallon	
Waste corrosive (acetic acid)	Liquid	1 gallon	
Waste corrosive (oxalic acid)	Liquid	1 pint	
Waste toxic organic (tralomethrin)	Liquid	1 gallon	
Waste toxic organic liquid (glyphosphate isopropylamine)	Liquid	1 gallon	
Waste toxic organic (pyrethrine)	Liquid	1 gallon	
Waste toxic organic (1,1,1-trichloroethane)	Liquid	1 gallon	
Non-regulated material (latex paint)	Liquid	600 pounds	
Universal waste (batteries and fluorescent light bulbs)	Solid	326 pounds	
Compressed nitrogen	Gas	1 cylinder	
Flammable paint	Liquid	1 cubic yard	
Empty drums	Solid	5 55-gallon drums	
Propane cylinders	Gas	3 cylinders	
Non-regulated material	Liquid	1 55-gallon drum	
Non-hazardous wastewater from vault	Liquid	5,620 gallons	Clean Waters LTD Dayton, Ohio
Solvent liquid from USTs	Liquid	2,300 gallons	PSC Detroit, Michigan
Solvent-contaminated water from USTs	Liquid	6,998 gallons	Clean Waters LTD Dayton, Ohio
Scrap metal from USTs	Solid	19.99 tons	Omni Source Indianapolis, Indiana
Tires	Solid	45 cubic yards	CGS Services Morristown, Indiana
VOC-contaminated soil	Solid	13,581 tons (417 loads)	Twin Bridges Landfill Danville, Indiana

Notes:

TABLE 1
WASTE DISPOSAL SUMMARY TABLE
CROWN LAUNDRY SITE
INDIANAPOLIS, MARION COUNTY, INDIANA

EQ = Environmental Quality
PCE = Tetrachloroethene

UST = Underground storage tank
VOC = Volatile organic compound

TABLE 2
UST AND VAULT SUMMARY TABLE
CROWN LAUNDRY SITE
INDIANAPOLIS, MARION COUNTY, INDIANA

Tank or Vault No.	Contents	Size (gallons)	Approximate Volume (gallons)
01	Stoddard solvents	8,000	2,798
02	Water	500	200
03	Empty	90	0
04	Toluene; ethylbenzene; xylenes; 1,1,1-trichloroethane; and cis-1,2-DCE	850	500
05	Stoddard solvents	1,100	850
06	Stoddard solvents	500	200
07	PCE and xylenes	500	500
08	Xylenes	850	500
09	Water/oil	5,000	200
10	Empty	3,300	0
11	Water/oil	2,000	1,250
12	Empty	5,000	0
13	Xylenes	5,000	2,300
14	Empty	5,000	0
Vault	Water	6,000	5,620

Notes:

DCE = Dichloroethene

PCE = Tetrachloroethene

UST = Underground storage tank

TABLE 3
SUMMARY OF SOIL BORING SAMPLING RESULTS
CROWN LAUNDRY SITE
INDIANAPOLIS, MARION COUNTY, INDIANA

Analyte	RISC Industrial Action Level	RISC Residential Action Level	Soil Boring No.	S01	S02	S03	S04	S04
			Sampling Depth (ft bgs)	15 to 17.5	15 to 17.5	16 to 17	14 to 15	15 to 17.5
			Unit	Result				
1,1-Dichloroethane	58,000	5,600	ppb	ND	ND	ND	ND	ND
1,1-DCE	42,000	58	ppb	ND	ND	ND	7.3	110
1,2-Dichloropropane	250	30	ppb	ND	ND	ND	ND	ND
2-Butanone	250,000	35,000	ppb	ND	ND	ND	ND	ND
Acetone	370,000	28,000	ppb	41	36	35	45	37
Benzene	350	34	ppb	ND	ND	19	10	29
cis-1,2-DCE	5,800	400	ppb	ND	24	ND	290	17,000
Ethylbenzene	160,000	13,000	ppb	ND	ND	49	23	670
PCE	640	58	ppb	ND	ND	ND	800,000	62,000
Toluene	96,000	12,000	ppb	8.3	7.2	12	32	59
Total xylenes	170,000	170,000	ppb	5	7.8	37	54	2,200
trans-1,2-DCE	14,000	680	ppb	ND	ND	ND	14	200
TCE	350	57	ppb	ND	ND	ND	1,100	21,000
Vinyl chloride	27	13	ppb	ND	ND	ND	ND	1,200

Analyte	RISC Industrial Action Level	RISC Residential Action Level	Soil Boring No.	S05	S05	S06	S07	S08
			Sampling Depth (ft bgs)	8 to 9	15 to 17.5	14 to 15	17 to 19	17 to 19
			Unit	Result				
1,1-Dichloroethane	58,000	5,600	ppb	ND	ND	ND	ND	ND
1,1-DCE	42,000	58	ppb	ND	ND	ND	ND	ND
1,2-Dichloropropane	250	30	ppb	ND	ND	ND	ND	ND
2-Butanone	250,000	35,000	ppb	ND	ND	ND	ND	ND
Acetone	370,000	28,000	ppb	44	37	33	35	39
Benzene	350	34	ppb	9.1	7.3	ND	ND	ND
cis-1,2-DCE	5,800	400	ppb	ND	ND	ND	ND	ND
Ethylbenzene	160,000	13,000	ppb	55	33	ND	ND	ND
PCE	640	58	ppb	ND	ND	ND	ND	ND
Toluene	96,000	12,000	ppb	31	19	3.4	8.1	9.4
Total xylenes	170,000	170,000	ppb	130	87	ND	5	5.6
trans-1,2-DCE	14,000	680	ppb	ND	ND	ND	ND	ND
TCE	350	57	ppb	ND	ND	ND	ND	ND
Vinyl chloride	27	13	ppb	ND	ND	ND	ND	ND

TABLE 3
SUMMARY OF SOIL BORING SAMPLING RESULTS
CROWN LAUNDRY SITE
INDIANAPOLIS, MARION COUNTY, INDIANA

Analyte	RISC Industrial Action Level	RISC Residential Action Level	Soil Boring No.	S09	S10	S11	S12	S13
			Sampling Depth (ft bgs)	15 to 17.5	15 to 17.5	15 to 17.5	15 to 17.5	15 to 17.5
			Unit	Result				
1,1-Dichloroethane	58,000	5,600	ppb	ND	ND	ND	9.9	ND
1,1-DCE	42,000	58	ppb	ND	ND	ND	ND	ND
1,2-Dichloropropane	250	30	ppb	ND	ND	ND	ND	ND
2-Butanone	250,000	35,000	ppb	ND	ND	ND	ND	ND
Acetone	370,000	28,000	ppb	40	37	43	37	42
Benzene	350	34	ppb	ND	4.4	ND	ND	ND
cis-1,2-DCE	5,800	400	ppb	ND	ND	ND	750	ND
Ethylbenzene	160,000	13,000	ppb	ND	ND	ND	ND	ND
PCE	640	58	ppb	ND	ND	ND	4.1	ND
Toluene	96,000	12,000	ppb	8.6	13	7.1	7	6.9
Total xylenes	170,000	170,000	ppb	5.3	7.8	4.3	3.9	4.3
trans-1,2-DCE	14,000	680	ppb	ND	ND	ND	48	ND
TCE	350	57	ppb	ND	ND	ND	ND	ND
Vinyl chloride	27	13	ppb	ND	ND	ND	ND	ND

Analyte	RISC Industrial Action Level	RISC Residential Action Level	Soil Boring No.	S14	S15	S16	S17	S18
			Depth of Sample	17 to 19	16 to 19	15 to 17.5	12 to 15	12 to 15
			Unit	Result				
1,1-Dichloroethane	58,000	5,600	ppb	ND	ND	ND	ND	ND
1,1-DCE	42,000	58	ppb	ND	ND	ND	ND	ND
1,2-Dichloropropane	250	30	ppb	ND	ND	ND	ND	ND
2-Butanone	250,000	35,000	ppb	ND	ND	ND	ND	ND
Acetone	370,000	28,000	ppb	41	37	42	35	31
Benzene	350	34	ppb	4.2	ND	ND	ND	6.4
cis-1,2-DCE	5,800	400	ppb	ND	ND	ND	ND	ND
Ethylbenzene	160,000	13,000	ppb	ND	ND	ND	ND	ND
PCE	640	58	ppb	4.4	ND	ND	ND	ND
Toluene	96,000	12,000	ppb	12	8.1	7.7	4.7	5
Total xylenes	170,000	170,000	ppb	7.6	5.4	4.7	ND	ND
trans-1,2-DCE	14,000	680	ppb	ND	ND	ND	ND	ND
TCE	350	57	ppb	56	ND	ND	ND	ND
Vinyl chloride	27	13	ppb	ND	ND	ND	ND	ND

TABLE 3
SUMMARY OF SOIL BORING SAMPLING RESULTS
CROWN LAUNDRY SITE
INDIANAPOLIS, MARION COUNTY, INDIANA

Analyte	RISC Industrial Action Level	RISC Residential Action Level	Soil Boring No.	S19	S19	S20	S21	S21 (DUPE)
			Depth of Sample	8 to 10	16 to 19	16 to 19	16 to 19	16 to 19
			Unit	Result				
1,1-Dichloroethane	58,000	5,600	ppb	57	ND	ND	ND	ND
1,1-DCE	42,000	58	ppb	ND	ND	ND	ND	ND
1,2-Dichloropropane	250	30	ppb	7.5	ND	ND	ND	ND
2-Butanone	250,000	35,000	ppb	8	8.1	8	8	9
Acetone	370,000	28,000	ppb	43	32	40	40	45
Benzene	350	34	ppb	60	ND	ND	ND	ND
cis-1,2-DCE	5,800	400	ppb	1,200	15	ND	20	9.2
Ethylbenzene	160,000	13,000	ppb	410	ND	17	ND	ND
PCE	640	58	ppb	15	ND	ND	ND	ND
Toluene	96,000	12,000	ppb	81	3.2	5.1	6.2	7.2
Total xylenes	170,000	170,000	ppb	1500	ND	100	7.3	6.1
trans-1,2-DCE	14,000	680	ppb	22	ND	ND	ND	ND
TCE	350	57	ppb	ND	ND	ND	ND	ND
Vinyl chloride	27	13	ppb	ND	110	ND	ND	ND

Analyte	RISC Industrial Action Level	RISC Residential Action Level	Soil Boring No.	S22	S23	S24	S24 (DUPE)	S25
			Depth of Sample	12 to 15	15 to 17.5	15 to 17.5	15 to 17.5	12 to 15
			Unit	Result				
1,1-Dichloroethane	58,000	5,600	ppb	12	ND	ND	ND	ND
1,1-DCE	42,000	58	ppb	ND	ND	ND	ND	ND
1,2-Dichloropropane	250	30	ppb	ND	ND	ND	ND	ND
2-Butanone	250,000	35,000	ppb	9.2	9.2	7.5	7	7.8
Acetone	370,000	28,000	ppb	46	46	38	47	39
Benzene	350	34	ppb	35	50	ND	ND	ND
cis-1,2-DCE	5,800	400	ppb	17	26	ND	ND	ND
Ethylbenzene	160,000	13,000	ppb	500	ND	ND	ND	ND
PCE	640	58	ppb	ND	ND	ND	ND	ND
Toluene	96,000	12,000	ppb	64	9	8.3	6.4	5.6
Total xylenes	170,000	170,000	ppb	1900	5.4	5.3	3.6	ND
trans-1,2-DCE	14,000	680	ppb	ND	ND	ND	ND	ND
TCE	350	57	ppb	ND	ND	ND	ND	ND
Vinyl chloride	27	13	ppb	87	12	ND	ND	ND

TABLE 3
SUMMARY OF SOIL BORING SAMPLING RESULTS
CROWN LAUNDRY SITE
INDIANAPOLIS, MARION COUNTY, INDIANA

Analyte	RISC Industrial Action Level	RISC Residential Action Level	Soil Boring No.	S26	S27	S27 (DUPE)	S28	S29
			Depth of Sample	17 to 19	17 to 19	17 to 19	15 to 17.5	15 to 17.5
			Unit	Result				
1,1-Dichloroethane	58,000	5,600	ppb	ND	ND	ND	ND	ND
1,1-DCE	42,000	58	ppb	ND	ND	ND	ND	ND
1,2-Dichloropropane	250	30	ppb	ND	ND	ND	ND	ND
2-Butanone	250,000	35,000	ppb	7.3	7.8	7.8	8.1	7.7
Acetone	370,000	28,000	ppb	37	39	39	40	39
Benzene	350	34	ppb	ND	8	15	ND	ND
cis-1,2-DCE	5,800	400	ppb	ND	ND	5.7	ND	ND
Ethylbenzene	160,000	13,000	ppb	ND	ND	ND	ND	ND
PCE	640	58	ppb	ND	ND	ND	ND	ND
Toluene	96,000	12,000	ppb	5.3	5.5	6.1	5.7	4.8
Total xylenes	170,000	170,000	ppb	ND	ND	ND	ND	ND
trans-1,2-DCE	14,000	680	ppb	ND	ND	ND	ND	ND
TCE	350	57	ppb	ND	ND	ND	ND	ND
Vinyl chloride	27	13	ppb	ND	ND	ND	ND	ND

Analyte	RISC Industrial Action Level	RISC Residential Action Level	Soil Boring No.	S30	S31	S32	S33	S34
			Depth of Sample	15 to 17.5	17 to 19	17 to 19	17 to 19	1 to 2
			Unit	Result				
1,1-Dichloroethane	58,000	5,600	ppb	ND	ND	ND	ND	ND
1,1-DCE	42,000	58	ppb	ND	ND	ND	ND	ND
1,2-Dichloropropane	250	30	ppb	ND	ND	ND	ND	ND
2-Butanone	250,000	35,000	ppb	7.7	11	6.9	6.8	7.9
Acetone	370,000	28,000	ppb	39	53	34	34	40
Benzene	350	34	ppb	ND	5.4	7.1	20	ND
cis-1,2-DCE	5,800	400	ppb	ND	ND	120	11	ND
Ethylbenzene	160,000	13,000	ppb	ND	ND	ND	ND	4.6
PCE	640	58	ppb	ND	ND	ND	ND	ND
Toluene	96,000	12,000	ppb	4.1	14	5.5	5.1	12
Total xylenes	170,000	170,000	ppb	ND	7.8	ND	3.4	12
trans-1,2-DCE	14,000	680	ppb	ND	ND	35	ND	ND
TCE	350	57	ppb	ND	ND	29	ND	ND
Vinyl chloride	27	13	ppb	ND	ND	20	22	ND

TABLE 3
SUMMARY OF SOIL BORING SAMPLING RESULTS
CROWN LAUNDRY SITE
INDIANAPOLIS, MARION COUNTY, INDIANA

Analyte	RISC	RISC	Soil Boring No.	S34	S34 (DUPE)	S35	S36	S37
	Industrial	Residential	Depth of Sample	17 to 19	17 to 19	12 to 15	15 to 17.5	15 to 17.5
	Action Level	Action Level	Unit	Result				
1,1-Dichloroethane	58,000	5,600	ppb	ND	ND	ND	ND	ND
1,1-DCE	42,000	58	ppb	ND	ND	ND	ND	ND
1,2-Dichloropropane	250	30	ppb	ND	ND	ND	ND	ND
2-Butanone	250,000	35,000	ppb	7.3	9.1	8.2	6.9	7.4
Acetone	370,000	28,000	ppb	37	45	41	34	37
Benzene	350	34	ppb	3.7	4.5	ND	ND	ND
cis-1,2-DCE	5,800	400	ppb	ND	ND	ND	ND	4.9
Ethylbenzene	160,000	13,000	ppb	ND	ND	ND	ND	ND
PCE	640	58	ppb	ND	ND	440	ND	ND
Toluene	96,000	12,000	ppb	3.8	6.4	9	4	3.9
Total xylenes	170,000	170,000	ppb	ND	4.7	6.7	ND	ND
trans-1,2-DCE	14,000	680	ppb	ND	ND	ND	ND	ND
TCE	350	57	ppb	ND	ND	ND	ND	ND
Vinyl chloride	27	13	ppb	ND	ND	ND	ND	ND

Notes:

Yellow shaded and bolded results exceed the RISC Residential Action Level.

Red shaded and bolded results exceed the RISC Residential and Industrial Action Levels.

bgs = Below ground surface

DCE = Dichloroethene

DUPE = Duplicate

ft = Foot

ND = Not detected above the reporting limit

PCE = Tetrachloroethene

ppb = Part per billion

RISC = Risk Integrated System of Closure

TCE = Trichloroethene

TABLE 4
SUMMARY OF POST-EXCAVATION SOIL SAMPLING RESULTS
CROWN LAUNDRY SITE
INDIANAPOLIS, MARION COUNTY, INDIANA

Analyte	RISC Industrial Action Level	RISC Residential Action Level	Sample No.	CL-051411-03	CL-051811-01	CL-051811-02	CL-051811-03	CL-051811-05
			Collection Date	5/14/2011	5/18/2011	5/18/2011	5/18/2011	5/18/2011
			Unit	Result				
1,1-Dichloroethane	58,000	5,600	ppb	ND	ND	ND	ND	ND
1,1-DCE	42,000	58	ppb	ND	ND	ND	ND	ND
1,2-Dichloropropane	250	30	ppb	ND	ND	ND	ND	ND
2-Butanone	250,000	35,000	ppb	ND	ND	ND	ND	ND
Acetone	370,000	28,000	ppb	ND	ND	ND	ND	42
Benzene	350	34	ppb	4.6	ND	ND	ND	ND
cis-1,2-DCE	5,800	400	ppb	ND	ND	6.3	ND	ND
Ethylbenzene	160,000	13,000	ppb	ND	ND	ND	4.4	ND
PCE	640	58	ppb	30	13	16	12	ND
Toluene	96,000	12,000	ppb	8.9	7.5	5.4	13	ND
Total xylenes	170,000	170,000	ppb	8.8	8.6	5.1	9.2	ND
trans-1,2-DCE	14,000	680	ppb	ND	ND	ND	ND	ND
TCE	350	57	ppb	ND	ND	4.3	ND	ND
Vinyl chloride	27	13	ppb	ND	ND	ND	ND	ND

Analyte	RISC Industrial Action Level	RISC Residential Action Level	Sample No.	CL-051811-06	CL-051811-08	CL-052011-01	CL-052011-03	CL-052011-04
			Collection Date	5/18/2011	5/18/2011	5/20/2011	5/20/2011	5/20/2011
			Unit	Result				
1,1-Dichloroethane	58,000	5,600	ppb	ND	ND	ND	ND	ND
1,1-DCE	42,000	58	ppb	ND	ND	ND	ND	ND
1,2-Dichloropropane	250	30	ppb	ND	ND	ND	ND	ND
2-Butanone	250,000	35,000	ppb	ND	ND	ND	ND	ND
Acetone	370,000	28,000	ppb	ND	ND	ND	ND	ND
Benzene	350	34	ppb	ND	ND	ND	ND	4.5
cis-1,2-DCE	5,800	400	ppb	ND	ND	ND	ND	52
Ethylbenzene	160,000	13,000	ppb	ND	8.8	17	ND	4.2
PCE	640	58	ppb	16	7	ND	4.3	8.2
Toluene	96,000	12,000	ppb	9.5	12	14	7.9	11
Total Xylenes	170,000	170,000	ppb	8.1	18	81	7.2	14
trans-1,2-DCE	14,000	680	ppb	ND	ND	ND	ND	ND
TCE	350	57	ppb	ND	ND	ND	ND	7.7
Vinyl chloride	27	13	ppb	ND	ND	ND	ND	ND

TABLE 4
SUMMARY OF POST-EXCAVATION SOIL SAMPLING RESULTS
CROWN LAUNDRY SITE
INDIANAPOLIS, MARION COUNTY, INDIANA

Analyte	RISC Industrial Action Level	RISC Residential Action Level	Sample No.	CL-051811-10	CL-051811-12	CL-052011-14	CL-052011-17	CL-052011-18
			Collection Date	5/18/2011	5/18/2011	5/20/2011	5/20/2011	5/20/2011
			Unit	Result				
1,1-Dichloroethane	58,000	5,600	ppb	ND	ND	ND	ND	ND
1,1-DCE	42,000	58	ppb	ND	ND	ND	ND	ND
1,2-Dichloropropane	250	30	ppb	ND	ND	ND	ND	ND
2-Butanone	250,000	35,000	ppb	ND	19	ND	ND	ND
Acetone	370,000	28,000	ppb	ND	81	ND	ND	38
Benzene	350	34	ppb	5.8	11	ND	ND	ND
cis-1,2-DCE	5,800	400	ppb	32	19	ND	ND	ND
Ethylbenzene	160,000	13,000	ppb	56	260	5.2	ND	ND
PCE	640	58	ppb	37	40	ND	ND	ND
Toluene	96,000	12,000	ppb	25	31	11	5.7	7.7
Total xylenes	170,000	170,000	ppb	370	410	14	9	9
trans-1,2-DCE	14,000	680	ppb	ND	ND	ND	ND	ND
TCE	350	57	ppb	ND	6.7	ND	ND	ND
Vinyl chloride	27	13	ppb	ND	ND	ND	ND	ND

Analyte	RISC Industrial Action Level	RISC Residential Action Level	Sample No.	CL-051811-19	CL-051811-22	CL-052011-23	CL-061311-01	CL-061311-02
			Collection Date	5/18/2011	5/18/2011	5/20/2011	6/13/2011	6/13/2011
			Unit	Result				
1,1-Dichloroethane	58,000	5,600	ppb	ND	ND	ND	ND	ND
1,1-DCE	42,000	58	ppb	ND	ND	ND	ND	ND
1,2-Dichloropropane	250	30	ppb	ND	ND	ND	ND	ND
2-Butanone	250,000	35,000	ppb	ND	ND	ND	ND	ND
Acetone	370,000	28,000	ppb	ND	ND	ND	ND	ND
Benzene	350	34	ppb	4.6	ND	4.1	ND	ND
cis-1,2-DCE	5,800	400	ppb	ND	ND	ND	ND	ND
Ethylbenzene	160,000	13,000	ppb	4.2	ND	ND	ND	ND
PCE	640	58	ppb	ND	ND	ND	ND	55
Toluene	96,000	12,000	ppb	13	5.3	8.1	ND	ND
Total xylenes	170,000	170,000	ppb	10	6	6	ND	ND
trans-1,2-DCE	14,000	680	ppb	ND	ND	ND	ND	ND
TCE	350	57	ppb	ND	ND	ND	ND	ND
Vinyl chloride	27	13	ppb	ND	ND	ND	ND	ND

TABLE 4
SUMMARY OF POST-EXCAVATION SOIL SAMPLING RESULTS
CROWN LAUNDRY SITE
INDIANAPOLIS, MARION COUNTY, INDIANA

Analyte	RISC Industrial Action Level	RISC Residential Action Level	Sample No.	CL-061311-03	CL-061311-04	CL-061311-06	CL-061311-07	CL-061711-01
			Collection Date	6/13/2011	6/13/2011	6/13/2011	6/13/2011	6/17/2011
			Unit	Result				
1,1-Dichloroethane	58,000	5,600	ppb	ND	ND	ND	ND	ND
1,1-DCE	42,000	58	ppb	ND	ND	ND	ND	ND
1,2-Dichloropropane	250	30	ppb	ND	ND	ND	ND	ND
2-Butanone	250,000	35,000	ppb	ND	ND	ND	ND	ND
Acetone	370,000	28,000	ppb	ND	ND	ND	ND	ND
Benzene	350	34	ppb	ND	ND	ND	ND	ND
cis-1,2-DCE	5,800	400	ppb	ND	ND	ND	ND	ND
Ethylbenzene	160,000	13,000	ppb	ND	ND	ND	ND	ND
PCE	640	58	ppb	14.6	ND	ND	ND	ND
Toluene	96,000	12,000	ppb	ND	ND	ND	ND	ND
Total xylenes	170,000	170,000	ppb	ND	ND	ND	ND	ND
trans-1,2-DCE	14,000	680	ppb	ND	ND	ND	ND	ND
TCE	350	57	ppb	ND	ND	ND	ND	ND
Vinyl chloride	27	13	ppb	ND	ND	ND	ND	ND

Analyte	RISC Industrial Action Level	RISC Residential Action Level	Sample No.	CL-061711-02	CL-061711-03	CL-061711-04	CL-061711-05	CL-061711-06
			Collection Date	6/17/2011	6/17/2011	6/17/2011	6/17/2011	6/17/2011
			Unit	Result				
1,1-Dichloroethane	58,000	5,600	ppb	ND	ND	ND	ND	ND
1,1-DCE	42,000	58	ppb	ND	ND	ND	ND	ND
1,2-Dichloropropane	250	30	ppb	ND	ND	ND	ND	ND
2-Butanone	250,000	35,000	ppb	ND	ND	ND	ND	ND
Acetone	370,000	28,000	ppb	ND	ND	ND	ND	ND
Benzene	350	34	ppb	ND	ND	ND	ND	ND
cis-1,2-DCE	5,800	400	ppb	ND	ND	ND	ND	ND
Ethylbenzene	160,000	13,000	ppb	ND	ND	ND	ND	ND
PCE	640	58	ppb	25.5	79.3	ND	ND	8.53
Toluene	96,000	12,000	ppb	ND	ND	ND	ND	ND
Total xylenes	170,000	170,000	ppb	ND	ND	ND	ND	ND
trans-1,2-DCE	14,000	680	ppb	1	1	1	1	1
TCE	350	57	ppb	ND	ND	ND	ND	ND
Vinyl chloride	27	13	ppb	ND	ND	ND	ND	ND

TABLE 4
SUMMARY OF POST-EXCAVATION SOIL SAMPLING RESULTS
CROWN LAUNDRY SITE
INDIANAPOLIS, MARION COUNTY, INDIANA

Analyte	RISC Industrial Action Level	RISC Residential Action Level	Sample No.	CL-061711-07	CL-062211-01	CL-062211-02	CL-062211-03	CL-062211-04
			Collection Date	6/17/2011	6/22/2011	6/22/2011	6/22/2011	6/22/2011
			Unit	Result				
1,1-Dichloroethane	58,000	5,600	ppb	ND	ND	ND	ND	ND
1,1-DCE	42,000	58	ppb	ND	ND	ND	ND	ND
1,2-Dichloropropane	250	30	ppb	ND	ND	ND	ND	ND
2-Butanone	250,000	35,000	ppb	ND	ND	ND	ND	ND
Acetone	370,000	28,000	ppb	ND	ND	ND	ND	ND
Benzene	350	34	ppb	ND	ND	ND	ND	ND
cis-1,2-DCE	5,800	400	ppb	ND	ND	ND	ND	ND
Ethylbenzene	160,000	13,000	ppb	ND	ND	ND	ND	ND
PCE	640	58	ppb	ND	ND	ND	ND	ND
Toluene	96,000	12,000	ppb	ND	ND	ND	ND	ND
Total xylenes	170,000	170,000	ppb	ND	ND	ND	ND	ND
trans-1,2-DCE	14,000	680	ppb	1	ND	ND	ND	ND
TCE	350	57	ppb	ND	ND	ND	ND	ND
Vinyl chloride	27	13	ppb	ND	ND	ND	ND	ND

Analyte	RISC Industrial Action Level	RISC Residential Action Level	Sample No.	CL-062211-05
			Collection Date	6/22/2011
			Unit	Result
1,1-Dichloroethane	58,000	5,600	ppb	ND
1,1-DCE	42,000	58	ppb	ND
1,2-Dichloropropane	250	30	ppb	ND
2-Butanone	250,000	35,000	ppb	ND
Acetone	370,000	28,000	ppb	ND
Benzene	350	34	ppb	ND
cis-1,2-DCE	5,800	400	ppb	ND
Ethylbenzene	160,000	13,000	ppb	ND
PCE	640	58	ppb	4.16
Toluene	96,000	12,000	ppb	ND
Total xylenes	170,000	170,000	ppb	ND
trans-1,2-DCE	14,000	680	ppb	ND
TCE	350	57	ppb	ND
Vinyl chloride	27	13	ppb	ND

Notes:

DCE = Dichloroethene

ND = Not detected above the reporting limit

PCE = Tetrachloroethene

ppb = Part per billion

RISC = Risk Integrated System of Closure

TCE = Trichloroethene

TABLE 5
VAPOR INTRUSION SAMPLING RESULTS
CROWN LAUNDRY SITE
INDIANAPOLIS, MARION COUNTY, INDIANA

Chemical	Indoor Air Screening Level	Sub-slab Gas Screening Level	Sampling Date	5/5/2011	6/13/2011	9/28/2011	4/6/2012	4/6/2012
			Sampling Location	non responsive	non responsive	non responsive	non responsive	non responsive
			Sample Type	Baseline Indoor Air	Proficiency Indoor Air	Proficiency Sub-Slab	Proficiency Sub-Slab	Proficiency Indoor Air
			Unit	Result				
Acrolein	0.009	0.1	ppbv	ND	0.82	ND	ND	ND
Chloroform	0.09	0.1	ppbv	ND	0.43	ND	ND	ND
PCE	0.3	2.8	ppbv	ND	0.28	ND	ND	ND
TCE	0.9	2.2	ppbv	0.84	0.13	ND	ND	ND
1,1,1-TCA	700	7,000	ppbv	ND	0.042	ND	ND	ND
1,2,4-Trimethylbenzene	1.5	15	ppbv	ND	0.79	2.1	ND	ND
Benzene	0.4	4	ppbv	0.68	0.43	3.1	ND	ND
Ethylbenzene	0.2	2.2	ppbv	ND	0.67	2.4	ND	ND
Toluene	80	800	ppbv	1.6	2.4	9.1	ND	ND
Carbon tetrachloride	0.3	0.7	ppbv	ND	0.1	ND	ND	ND

Chemical	Indoor Air Screening Level	Sub-slab Gas Screening Level	Sampling Date	5/19/2011	6/13/2011	9/26/2011	4/5/2012	2/22/2011
			Sampling Location	non responsive	non responsive	non responsive	non responsive	non responsive
			Sample Type	Baseline Indoor Air	Proficiency Indoor Air	Proficiency Indoor Air	Proficiency Indoor Air	Baseline Sub-Slab
			Unit	Result				
Acrolein	0.009	0.1	ppbv	10	15	3.9	ND	ND
Chloroform	0.09	0.1	ppbv	ND	0.4	ND	ND	ND
PCE	0.3	2.8	ppbv	ND	0.17	ND	ND	ND
TCE	0.9	2.2	ppbv	ND	0.062	ND	ND	ND
1,1,1-TCA	700	7,000	ppbv	ND	0.014	ND	ND	ND
1,2,4-Trimethylbenzene	1.5	15	ppbv	0.69	0.39	ND	ND	ND
Benzene	0.4	4	ppbv	3.2	5.6	2.1	2.2	ND
Ethylbenzene	0.2	2.2	ppbv	0.77	0.66	0.52	ND	ND
Toluene	80	800	ppbv	5.8	4.9	4.6	4.3	0.61
Carbon tetrachloride	0.3	0.7	ppbv	ND	0.097	ND	ND	ND

TABLE 5
VAPOR INTRUSION SAMPLING RESULTS
CROWN LAUNDRY SITE
INDIANAPOLIS, MARION COUNTY, INDIANA

Chemical	Indoor Air Screening Level	Sub-slab Gas Screening Level	Sampling Date	6/13/2011	2/22/2011	2/22/2011	2/22/2011	4/7/2011
			Sampling Location	non responsive	non responsive	non responsive	non responsive	non responsive
			Sample Type	Baseline Indoor Air	Baseline Sub-Slab	Baseline Indoor Air	Baseline Sub-Slab	Baseline Indoor Air
			Unit	Result				
Acrolein	0.009	0.1	ppbv	2.7	2.4	0.73	ND	ND
Chloroform	0.09	0.1	ppbv	0.69	1.4	0.63	0.69	ND
PCE	0.3	2.8	ppbv	0.41	ND	ND	ND	ND
TCE	0.9	2.2	ppbv	0.051	ND	ND	ND	ND
1,1,1-TCA	700	7,000	ppbv	0.069	ND	ND	ND	ND
1,2,4-Trimethylbenzene	1.5	15	ppbv	0.8	ND	ND	ND	ND
Benzene	0.4	4	ppbv	0.73	ND	ND	ND	ND
Ethylbenzene	0.2	2.2	ppbv	0.53	ND	ND	ND	ND
Toluene	80	800	ppbv	3.6	ND	ND	ND	ND
Carbon tetrachloride	0.3	0.7	ppbv	0.11	ND	ND	ND	ND

Chemical	Indoor Air Screening Level	Sub-slab Gas Screening Level	Sampling Date	5/11/2011	6/13/2011	9/26/2011	4/5/2012	4/26/2011
			Sampling Location	non responsive	non responsive	non responsive	non responsive	non responsive
			Sample Type	Baseline Indoor Air	Proficiency Indoor Air	Proficiency Indoor Air	Proficiency Indoor Air	Baseline Indoor Air
			Unit	Result				
Acrolein	0.009	0.1	ppbv	6.9	4.6	4.5	ND	0.62
Chloroform	0.09	0.1	ppbv	ND	0.18	ND	ND	ND
PCE	0.3	2.8	ppbv	ND	0.75	ND	ND	ND
TCE	0.9	2.2	ppbv	ND	0.066	ND	ND	0.55
1,1,1-TCA	700	7,000	ppbv	ND	0.048	ND	ND	ND
1,2,4-Trimethylbenzene	1.5	15	ppbv	2.9	0.55	ND	ND	0.55
Benzene	0.4	4	ppbv	3.8	2	2.4	1.7	1.1
Ethylbenzene	0.2	2.2	ppbv	1.3	0.69	0.75	ND	ND
Toluene	80	800	ppbv	15	8	8.6	4.4	2.2
Carbon tetrachloride	0.3	0.7	ppbv	ND	0.11	ND	ND	ND

TABLE 5
VAPOR INTRUSION SAMPLING RESULTS
CROWN LAUNDRY SITE
INDIANAPOLIS, MARION COUNTY, INDIANA

Chemical	Indoor Air Screening Level	Sub-slab Gas Screening Level	Sampling Date	6/13/2011	9/26/2011	9/27/2011	4/5/2012	4/5/2012
			Sampling Location	non responsive	non-responsive	non-responsive	non-responsive	non-responsive
			Sample Type	Proficiency Indoor Air	Proficiency Sub-Slab	Proficiency Indoor Air	Proficiency Sub-Slab	Proficiency Indoor Air
			Unit	Result				
Acrolein	0.009	0.1	ppbv	0.91	0.7	ND	ND	ND
Chloroform	0.09	0.1	ppbv	0.081	ND	ND	ND	ND
PCE	0.3	2.8	ppbv	1.7	ND	ND	ND	ND
TCE	0.9	2.2	ppbv	0.089	0.5	ND	ND	ND
1,1,1-TCA	700	7,000	ppbv	0.017	ND	ND	ND	ND
1,2,4-Trimethylbenzene	1.5	15	ppbv	0.76	ND	ND	ND	ND
Benzene	0.4	4	ppbv	0.75	ND	ND	ND	ND
Ethylbenzene	0.2	2.2	ppbv	0.4	ND	ND	ND	ND
Toluene	80	800	ppbv	2.8	1.6	1.3	ND	ND
Carbon tetrachloride	0.3	0.7	ppbv	0.12	ND	ND	ND	ND

Chemical	Indoor Air Screening Level	Sub-slab Gas Screening Level	Sampling Date	2/22/2011	4/26/2011	6/13/2011	9/26/2011	9/26/2011
			Sampling Location	non responsive	non-responsiv	non-responsive	non-responsive	non-responsive
			Sample Type	Baseline Indoor Air	Baseline Indoor Air	Proficiency Indoor Air	Proficiency Sub-Slab	Proficiency Indoor Air
			Unit	Result				
Acrolein	0.009	0.1	ppbv	ND	ND	1.1	1.4	ND
Chloroform	0.09	0.1	ppbv	ND	ND	0.15	ND	ND
PCE	0.3	2.8	ppbv	ND	ND	1.5	ND	ND
TCE	0.9	2.2	ppbv	ND	ND	0.083	ND	ND
1,1,1-TCA	700	7,000	ppbv	ND	ND	0.033	ND	ND
1,2,4-Trimethylbenzene	1.5	15	ppbv	ND	1.1	0.5	ND	ND
Benzene	0.4	4	ppbv	ND	0.67	0.35	ND	ND
Ethylbenzene	0.2	2.2	ppbv	ND	ND	0.19	ND	ND
Toluene	80	800	ppbv	0.69	1.9	1.1	ND	ND
Carbon tetrachloride	0.3	0.7	ppbv	ND	ND	0.11	ND	ND

TABLE 5
VAPOR INTRUSION SAMPLING RESULTS
CROWN LAUNDRY SITE
INDIANAPOLIS, MARION COUNTY, INDIANA

Chemical	Indoor Air Screening Level	Sub-slab Gas Screening Level	Sampling Date	4/5/2012	4/5/2012	2/22/2011	4/4/2011	6/15/2011
			Sampling Location	non responsive	non responsive	non responsive	non responsive	non responsive
			Sample Type	Proficiency Sub-Slab	Proficiency Indoor Air	Baseline Sub-Slab	Baseline Indoor Air	Proficiency Indoor Air
			Unit	Result				
Acrolein	0.009	0.1	ppbv	ND	ND	1.7	ND	1
Chloroform	0.09	0.1	ppbv	1.3	ND	1.1	ND	0.13
PCE	0.3	2.8	ppbv	ND	ND	2.8	ND	0.13
TCE	0.9	2.2	ppbv	ND	ND	ND	ND	0.029
1,1,1-TCA	700	7,000	ppbv	ND	ND	ND	ND	0.21
1,2,4-Trimethylbenzene	1.5	15	ppbv	ND	ND	ND	ND	0.65
Benzene	0.4	4	ppbv	ND	ND	ND	ND	0.42
Ethylbenzene	0.2	2.2	ppbv	ND	ND	ND	ND	1.3
Toluene	80	800	ppbv	ND	1.8	2.7	0.58	8.9
Carbon tetrachloride	0.3	0.7	ppbv	ND	ND	ND	ND	0.14

Chemical	Indoor Air Screening Level	Sub-slab Gas Screening Level	Sampling Date	9/26/2011	4/7/2012	5/25/2011	6/13/2011	9/26/2011
			Sampling Location	non responsive	non responsive	non responsive	non responsive	non responsive
			Sample Type	Proficiency Indoor Air	Proficiency Indoor Air	Baseline Indoor Air	Proficiency Indoor Air	Proficiency Sub-Slab
			Unit	Result				
Acrolein	0.009	0.1	ppbv	ND	ND	1.1	2.2	ND
Chloroform	0.09	0.1	ppbv	ND	ND	ND	0.2	ND
PCE	0.3	2.8	ppbv	ND	ND	ND	0.46	ND
TCE	0.9	2.2	ppbv	ND	ND	ND	0.083	0.85
1,1,1-TCA	700	7,000	ppbv	ND	ND	ND	0.016	ND
1,2,4-Trimethylbenzene	1.5	15	ppbv	ND	ND	ND	1.2	ND
Benzene	0.4	4	ppbv	ND	ND	0.64	0.89	ND
Ethylbenzene	0.2	2.2	ppbv	ND	ND	ND	1.1	ND
Toluene	80	800	ppbv	2.9	ND	1.4	7.4	0.8
Carbon tetrachloride	0.3	0.7	ppbv	ND	ND	ND	0.11	ND

TABLE 5
VAPOR INTRUSION SAMPLING RESULTS
CROWN LAUNDRY SITE
INDIANAPOLIS, MARION COUNTY, INDIANA

Chemical	Indoor Air Screening Level	Sub-slab Gas Screening Level	Sampling Date	9/26/2011	4/5/2012	2/22/2011	2/22/2011	4/4/2011
			Sampling Location	non responsive	non responsive	non responsive	non responsive	non responsive
			Sample Type	Proficiency Indoor Air	Proficiency Indoor Air	Baseline Indoor Air	Baseline Sub-Slab	Baseline Indoor Air
			Unit	Result				
Acrolein	0.009	0.1	ppbv	ND	ND	ND	ND	0.59
Chloroform	0.09	0.1	ppbv	ND	ND	ND	1.1	ND
PCE	0.3	2.8	ppbv	ND	ND	ND	15	ND
TCE	0.9	2.2	ppbv	ND	ND	ND	35	ND
1,1,1-TCA	700	7,000	ppbv	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	1.5	15	ppbv	ND	ND	ND	1	ND
Benzene	0.4	4	ppbv	ND	ND	ND	1	ND
Ethylbenzene	0.2	2.2	ppbv	ND	ND	ND	1.1	ND
Toluene	80	800	ppbv	ND	ND	ND	3.6	0.54
Carbon tetrachloride	0.3	0.7	ppbv	ND	ND	ND	1.4	ND

Chemical	Indoor Air Screening Level	Sub-slab Gas Screening Level	Sampling Date	6/15/2011	9/27/2011	4/5/2012	4/5/2012	2/22/2011
			Sampling Location	non responsive	non responsive	non responsive	non responsive	non responsive
			Sample Type	Proficiency Indoor Air	Proficiency Indoor Air	Proficiency Sub-Slab	Proficiency Indoor Air	Baseline Sub-Slab
			Unit	Result				
Acrolein	0.009	0.1	ppbv	3.2	1.1	ND	ND	ND
Chloroform	0.09	0.1	ppbv	0.97	ND	ND	ND	1.2
PCE	0.3	2.8	ppbv	0.075	ND	ND	ND	ND
TCE	0.9	2.2	ppbv	0.07	ND	ND	ND	ND
1,1,1-TCA	700	7,000	ppbv	0.018	ND	ND	ND	0.63
1,2,4-Trimethylbenzene	1.5	15	ppbv	0.35	ND	ND	ND	3.4
Benzene	0.4	4	ppbv	1.4	0.53	ND	ND	0.55
Ethylbenzene	0.2	2.2	ppbv	0.45	ND	ND	ND	3.2
Toluene	80	800	ppbv	3.3	0.98	ND	ND	8.8
Carbon tetrachloride	0.3	0.7	ppbv	0.12	ND	ND	ND	ND

TABLE 5
VAPOR INTRUSION SAMPLING RESULTS
CROWN LAUNDRY SITE
INDIANAPOLIS, MARION COUNTY, INDIANA

Chemical	Indoor Air Screening Level	Sub-slab Gas Screening Level	Sampling Date	5/11/2011	6/16/2011	9/26/2011	4/22/2011	4/22/2011
			Sampling Location	non responsive	non responsive	non responsive	non responsive	non responsive
			Sample Type	Baseline Indoor Air	Proficiency Indoor Air	Proficiency Indoor Air	Baseline Sub-Slab	Baseline Indoor Air
			Unit	Result				
Acrolein	0.009	0.1	ppbv	ND	0.94	ND	0.63	0.6
Chloroform	0.09	0.1	ppbv	ND	0.066	ND	ND	ND
PCE	0.3	2.8	ppbv	0.82	0.052	ND	ND	ND
TCE	0.9	2.2	ppbv	0.92	0.04	ND	0.53	ND
1,1,1-TCA	700	7,000	ppbv	ND	0.019	ND	ND	ND
1,2,4-Trimethylbenzene	1.5	15	ppbv	0.55	0.72	0.62	0.88	1.5
Benzene	0.4	4	ppbv	0.7	0.73	1.9	ND	ND
Ethylbenzene	0.2	2.2	ppbv	ND	0.44	0.71	ND	0.73
Toluene	80	800	ppbv	1.6	2.4	4.9	2.6	7.7
Carbon tetrachloride	0.3	0.7	ppbv	ND	0.11	ND	ND	ND

Chemical	Indoor Air Screening Level	Sub-slab Gas Screening Level	Sampling Date	6/13/2011	6/13/2011	7/26/2011	7/26/2011	8/10/2011
			Sampling Location	non responsive	non responsive	non responsive	non responsive	non responsive
			Sample Type	Proficiency Indoor Air N	Proficiency Indoor Air S	Proficiency Indoor Air N	Proficiency Indoor Air S	Proficiency Sub-Slab N
			Unit	Result				
Acrolein	0.009	0.1	ppbv	4.4	3.4	2.7	2.6	4.4
Chloroform	0.09	0.1	ppbv	2.1	1.1	1.6	0.78	ND
PCE	0.3	2.8	ppbv	0.3	1.6	ND	1.2	0.73
TCE	0.9	2.2	ppbv	0.099	0.076	2.2	0.97	ND
1,1,1-TCA	700	7,000	ppbv	ND	0.04	ND	ND	7.9
1,2,4-Trimethylbenzene	1.5	15	ppbv	2.2	10	1.1	8.6	84
Benzene	0.4	4	ppbv	1.1	0.94	1.4	1	2
Ethylbenzene	0.2	2.2	ppbv	0.83	4.6	0.51	5	2.3
Toluene	80	800	ppbv	11	130	3	32	6.6
Carbon tetrachloride	0.3	0.7	ppbv	0.12	0.11	ND	ND	ND

TABLE 5
VAPOR INTRUSION SAMPLING RESULTS
CROWN LAUNDRY SITE
INDIANAPOLIS, MARION COUNTY, INDIANA

Chemical	Indoor Air Screening Level	Sub-slab Gas Screening Level	Sampling Date	8/10/2011	8/10/2011	8/10/2011	9/26/2011	9/26/2011
			Sampling Location	non responsive	non responsive	non responsive	non responsive	non responsive
			Sample Type	Proficiency Indoor Air N	Proficiency Sub-Slab S	Proficiency Indoor Air S	Proficiency Sub-Slab N	Proficiency Sub-Slab S
			Unit	Result				
Acrolein	0.009	0.1	ppbv	4	ND	2.6	0.72	ND
Chloroform	0.09	0.1	ppbv	1.3	0.96	0.74	ND	ND
PCE	0.3	2.8	ppbv	ND	1.2	2.5	0.55	0.79
TCE	0.9	2.2	ppbv	ND	ND	ND	ND	ND
1,1,1-TCA	700	7,000	ppbv	ND	7.5	ND	1.6	6.5
1,2,4-Trimethylbenzene	1.5	15	ppbv	0.79	ND	6	4.9	ND
Benzene	0.4	4	ppbv	1.2	ND	0.8	ND	ND
Ethylbenzene	0.2	2.2	ppbv	ND	ND	3.8	2.1	ND
Toluene	80	800	ppbv	2.8	ND	39	21	ND
Carbon tetrachloride	0.3	0.7	ppbv	ND	ND	ND	ND	ND

Chemical	Indoor Air Screening Level	Sub-slab Gas Screening Level	Sampling Date	9/26/2011	9/26/2011	4/5/2012	4/5/2012	4/5/2012
			Sampling Location	non responsive	non responsive	non responsive	non responsive	non responsive
			Sample Type	Proficiency Indoor Air N	Proficiency Indoor Air S	Proficiency Sub-Slab N	Proficiency Sub-Slab S	Proficiency Indoor Air N
			Unit	Result				
Acrolein	0.009	0.1	ppbv	1.2	1	ND	ND	ND
Chloroform	0.09	0.1	ppbv	0.5	ND	ND	ND	ND
PCE	0.3	2.8	ppbv	ND	0.53	ND	ND	ND
TCE	0.9	2.2	ppbv	ND	ND	ND	ND	ND
1,1,1-TCA	700	7,000	ppbv	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	1.5	15	ppbv	0.91	4.1	ND	ND	ND
Benzene	0.4	4	ppbv	0.56	ND	ND	ND	ND
Ethylbenzene	0.2	2.2	ppbv	ND	1.8	ND	ND	ND
Toluene	80	800	ppbv	1.8	17	ND	ND	18
Carbon tetrachloride	0.3	0.7	ppbv	ND	ND	ND	ND	ND

TABLE 5
VAPOR INTRUSION SAMPLING RESULTS
CROWN LAUNDRY SITE
INDIANAPOLIS, MARION COUNTY, INDIANA

Chemical	Indoor Air Screening Level	Sub-slab Gas Screening Level	Sampling Date	4/5/2012	4/22/2011	6/13/2011	7/26/2011	8/10/2011
			Sampling Location	non responsive	non responsive	non responsive	non responsive	non responsive
			Sample Type	Proficiency Indoor Air S	Baseline Indoor Air	Proficiency Indoor Air	Proficiency Indoor Air	Proficiency Sub-Slab
			Unit	Result				
Acrolein	0.009	0.1	ppbv	ND	0.78	4	2.7	ND
Chloroform	0.09	0.1	ppbv	ND	ND	1.2	1.8	1.4
PCE	0.3	2.8	ppbv	ND	ND	0.77	ND	11
TCE	0.9	2.2	ppbv	ND	0.78	0.18	44	7.7
1,1,1-TCA	700	7,000	ppbv	ND	ND	0.015	ND	ND
1,2,4-Trimethylbenzene	1.5	15	ppbv	23	ND	0.82	0.69	1.3
Benzene	0.4	4	ppbv	ND	ND	0.6	0.52	1.5
Ethylbenzene	0.2	2.2	ppbv	2.2	ND	0.44	ND	1.9
Toluene	80	800	ppbv	27	0.73	2.1	6.6	5.8
Carbon tetrachloride	0.3	0.7	ppbv	ND	ND	0.11	ND	ND

Chemical	Indoor Air Screening Level	Sub-slab Gas Screening Level	Sampling Date	8/10/2011	9/26/2011	9/26/2011	4/5/2012	4/5/2012
			Sampling Location	non responsive	non responsive	non responsive	non responsive	non responsive
			Sample Type	Proficiency Indoor Air	Proficiency Sub-Slab	Proficiency Indoor Air	Proficiency Sub-Slab	Proficiency Indoor Air
			Unit	Result				
Acrolein	0.009	0.1	ppbv	2.7	0.78	0.69	ND	ND
Chloroform	0.09	0.1	ppbv	1.4	ND	ND	ND	ND
PCE	0.3	2.8	ppbv	0.52	9.2	ND	9	ND
TCE	0.9	2.2	ppbv	6.5	ND	0.59	2.4	ND
1,1,1-TCA	700	7,000	ppbv	ND	4.6	ND	ND	ND
1,2,4-Trimethylbenzene	1.5	15	ppbv	ND	ND	ND	ND	ND
Benzene	0.4	4	ppbv	ND	ND	ND	ND	ND
Ethylbenzene	0.2	2.2	ppbv	ND	ND	ND	ND	ND
Toluene	80	800	ppbv	2	0.57	0.82	ND	ND
Carbon tetrachloride	0.3	0.7	ppbv	ND	ND	ND	ND	ND

Notes:

Red shaded and bolded results exceed the sub-slab or indoor air screening level provided by the ATSDR.

ND = Not detected at the reporting limit

PCE = Tetrachloroethene

TCE = Trichloroethene

ppbv = Part per billion by volume

TCA = Trichloroethane

ATTACHMENT C
PHOTOGRAPHIC DOCUMENTATION



Site: Crown Laundry Site
Photograph No.: 1
Direction: East
Subject: Abandoned drums and containers

Date: 10/14/10
Photographer: Bob Armstrong



Site: Crown Laundry Site
Photograph No.: 2
Direction: North
Subject: Abandoned drums and tires

Date: 10/14/10
Photographer: Bob Armstrong



Site: Crown Laundry Site

Photograph No.: 3

Date: 10/14/10

Direction: West

Photographer: Bob Armstrong

Subject: ERRS personnel inventorying containers before off-site disposal



Site: Crown Laundry Site

Photograph No.: 4

Date: 10/14/10

Direction: East

Photographer: Bob Armstrong

Subject: ERRS personnel packaging containers for off-site disposal



Site: Crown Laundry Site

Photograph No.: 5

Date: 5/3/11

Direction: West

Photographer: Keith Hughes

Subject: ERRS personnel removing an excavated UST using a crane



Site: Crown Laundry Site

Photograph No.: 6

Date: 4/22/11

Direction: Down

Photographer: Keith Hughes

Subject: Soil staining in area from which an UST was removed



Site: Crown Laundry Site
Photograph No.: 7
Direction: South
Subject: Excavated USTs on plastic sheeting

Date: 4/14/11
Photographer: Keith Hughes



Site: Crown Laundry Site
Photograph No.: 8
Direction: South
Subject: Excavated UST with visible holes in side, indicating leakage of contents

Date: 4/14/11
Photographer: Keith Hughes



Site: Crown Laundry Site

Photograph No.: 9

Date: 4/14/11

Direction: South

Photographer: Keith Hughes

Subject: Excavated UST with large, visible holes in side



Site: Crown Laundry Site

Photograph No.: 10

Date: 4/12/11

Direction: Southwest

Photographer: Keith Hughes

Subject: ERRS personnel excavating VOC-contaminated soil



Site: Crown Laundry Site

Photograph No.: 11

Date: 5/11/11

Direction: East

Photographer: Keith Hughes

Subject: ERRS personnel loading VOC-contaminated soil for off-site disposal



Site: Crown Laundry Site

Photograph No.: 12

Date: 4/12/11

Direction: Southeast

Photographer: Keith Hughes

Subject: VOC monitoring using an AreaRAE network at Site perimeter



Site: Crown Laundry Site

Photograph No.: 13

Date: 4/13/11

Direction: North

Photographer: Keith Hughes

Subject: Particulate monitoring using DataRAM monitor at Site perimeter



Site: Crown Laundry Site

Photograph No.: 14

Date: 4/13/11

Direction: East

Photographer: Keith Hughes

Subject: Tank used to store solvent-contaminated water before off-site disposal



Site: Crown Laundry Site

Photograph No.: 15

Date: 5/10/11

Direction: Southeast

Photographer: Keith Hughes

Subject: Tanker truck vacuuming solvent-contaminated water for off-site disposal



Site: Crown Laundry Site

Photograph No.: 16

Date: 4/22/11

Direction: North

Photographer: Keith Hughes

Subject: Sub-slab sample collection from residential property



Site: Crown Laundry Site

Photograph No.: 17

Date: 5/25/11

Direction: East

Photographer: Keith Hughes

Subject: Indoor air sample collection from residential property



Site: Crown Laundry Site

Photograph No.: 18

Date: 5/17/11

Direction: West

Photographer: Keith Hughes

Subject: SSDS fan



Site: Crown Laundry Site

Photograph No.: 19

Date: 5/17/11

Direction: East

Photographer: Keith Hughes

Subject: SSDS manifold piping with U-tube manometer



Site: Crown Laundry Site

Photograph No.: 20

Date: 6/14/11

Direction: East

Photographer: Keith Hughes

Subject: ERRS contractor backfilling excavation areas

ATTACHMENT D
POLREPs

U.S. ENVIRONMENTAL PROTECTION AGENCY
POLLUTION/SITUATION REPORT
Crown Laundry - Removal Polrep
Initial Removal Polrep



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region V

Subject: POLREP #1
Initial POLREP
Crown Laundry
B5YW
Indianapolis, IN
Latitude: 39.7683040 Longitude: -86.1148780

To:
From: Shelly Lam, On-Scene Coordinator
Date: 10/12/2010
Reporting Period: October 12, 2010

1. Introduction

1.1 Background

Site Number:	B5YW	Contract Number:	
D.O. Number:	65	Action Memo Date:	
Response Authority:	CERCLA	Response Type:	Emergency
Response Lead:	EPA	Incident Category:	Removal Action
NPL Status:	Non NPL	Operable Unit:	
Mobilization Date:	10/12/2010	Start Date:	10/12/2010
Demob Date:		Completion Date:	
CERCLIS ID:		RCRIS ID:	
ERNS No.:		State Notification:	
FPN#:		Reimbursable Account #:	

1.1.1 Incident Category

CERCLA Incident Category - Inactive Production Facility

1.1.2 Site Description

1.1.2.1 Location

The Crown Laundry Site is located at 2913 East Washington Street in Indianapolis, Marion County, Indiana, 46201. The geographical coordinates for the Site are Latitude 39.768304° North and Longitude 86.114878° West. The Site is approximately 2.7 acres in size, and contains two commercial/industrial buildings. The Site is located in a residential and commercial area of Indianapolis, approximately 1.5 miles east of the

downtown area. Over 23,000 people live within 1 mile of the Site. Residences are located adjacent to the southern property boundary and 60 feet from the west property boundary.

1.1.2.2 Description of Threat

The Site is an abandoned industrial rug cleaner that operated from 1910-1975. Previous site investigation activities have identified volatile organic compounds (VOC) in soil and groundwater. The Indiana Department of Environmental Management (IDEM) and the City of Indianapolis referred the Site to the United States Environmental Protection Agency (U.S. EPA) for a site assessment and possible removal activities.

1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

On October 11, 2010, U.S. EPA and its Superfund Technical Assessment and Response Team (START) contractor conducted a site assessment to determine the need for a removal action. During the assessment, approximately 25 55-gallon drums and hundreds of small containers (5 gallons or less) were documented on-site. Many of the drums and containers could not be identified by labels. However, several drums and containers were labeled as containing sodium hydroxide, sodium hypochlorite, ammonia, and other hazardous substances. Field screening and hazcatting indicated that many of the materials met Resource Conservation and Recovery Act (RCRA) criteria for characteristic hazardous waste including ignitability and corrosivity. It was also documented that the Site was open and trespassing appeared to be a common occurrence. As such, EPA's On-Scene Coordinator (OSC) determined that there was an immediate threat of fire or explosion and exposure to trespassers and nearby residents from materials in the drums and other containers. U.S. EPA initiated emergency stabilization and removal activities on October 12, 2010.

2. Current Activities

2.1 Operations Section

2.1.1 Narrative

2.1.2 Response Actions to Date

On October 12, 2010, U.S. EPA and its Emergency and Rapid Response Service (ERRS) contractor took action to secure and stabilize the Site. A security firm has been retained to prevent trespassing until the drums and other containers can be properly disposed.

2.1.3 Enforcement Activities, Identity of Potentially Responsible Parties (PRPs)

Identification of a PRP and enforcement activities are on-going.

2.1.4 Progress Metrics

<i>Waste Stream</i>	<i>Medium</i>	<i>Quantity</i>	<i>Manifest #</i>	<i>Treatment</i>	<i>Disposal</i>
Pending					

2.2 Planning Section

2.2.1 Anticipated Activities

2.2.1.1 Planned Response Activities

During the next reporting period, U.S. EPA will conduct the following activities:

- Stage and segregate the drums and other containers in one area;
- Conduct sampling for disposal profiles;
- Conduct air monitoring and documentation;
- Secure the staging area by boarding it up; and
- Continue security until the drums are removed from the Site.

2.2.1.2 Next Steps

U.S. EPA will continue emergency removal activities to include disposal of the drums and other containers. The OSC will evaluate the need for a time-critical removal action for soil and hazardous substances contained in underground storage tanks (UST) based on the analytical results from the Site Assessment.

2.2.2 Issues

The Site is located in a high crime area of Indianapolis. As such, security will be maintained until the drums are removed and the Site is stabilized.

2.3 Logistics Section

Not applicable (NA)

2.4 Finance Section

2.4.1 Narrative

Emergency Response Branch (ERB) 1 Chief Jason El-Zein verbally authorized funding of \$50,000 on October 12, 2010.

2.5 Other Command Staff

2.5.1 Safety Officer

OSC Shelly Lam will be the Safety Officer for emergency removal actions.

2.6 Liaison Officer

NA

2.7 Information Officer

2.7.1 Public Information Officer

NA

2.7.2 Community Involvement Coordinator

NA

3. Participating Entities

3.1 Unified Command

NA

3.2 Cooperating Agencies

IDEM

City of Indianapolis

SEND

4. Personnel On Site

1 OSC
1 ERRS RM

5. Definition of Terms

ERB	Emergency Response Branch
ERRS	Emergency and Rapid Response Services
IDEM	Indiana Department of Environmental Management
NA	Not Applicable
OSC	On-Scene Coordinator
POLREP	Pollution Report
RCRA	Resource Conservation and Recovery Act
RM	Response Manager
START	Superfund Technical Assessment and Response Team
U.S. EPA	United States Environmental Protection Agency
UST	Underground Storage Tank
VOC	Volatile Organic Compounds

6. Additional sources of information

6.1 Internet location of additional information/report

For additional information, refer to www.epaosc.org/crownlaundry.

6.2 Reporting Schedule

The next POLREP will be submitted on October 13, 2010.

7. Situational Reference Materials

NA

U.S. ENVIRONMENTAL PROTECTION AGENCY
POLLUTION/SITUATION REPORT
Crown Laundry - Removal Polrep



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region V

Subject: POLREP #2
Progress POLREP
Crown Laundry
B5YW
Indianapolis, IN
Latitude: 39.7683040 Longitude: -86.1148780

To:
From: Shelly Lam, On-Scene Coordinator
Date: 10/13/2010
Reporting Period: October 13, 2010

1. Introduction

1.1 Background

Site Number:	B5YW	Contract Number:	
D.O. Number:	65	Action Memo Date:	
Response Authority:	CERCLA	Response Type:	Emergency
Response Lead:	EPA	Incident Category:	Removal Action
NPL Status:	Non NPL	Operable Unit:	
Mobilization Date:	10/12/2010	Start Date:	10/12/2010
Demob Date:		Completion Date:	
CERCLIS ID:		RCRIS ID:	
ERNS No.:		State Notification:	
FPN#:		Reimbursable Account #:	

1.1.1 Incident Category

CERCLA Incident Category - Inactive Production Facility

1.1.2 Site Description

1.1.2.1 Location

The Crown Laundry Site is located at 2913 East Washington Street in Indianapolis, Marion County, Indiana, 46201. The geographical coordinates for the Site are Latitude 39.768304° North and Longitude 86.114878° West. The Site is approximately 2.7 acres in size, and contains two commercial/industrial buildings. The Site is located in a residential and commercial area of Indianapolis, approximately 1.5 miles east of the downtown area. Over 23,000 people live within 1 mile of the Site. Residences are located adjacent to the

southern property boundary and 60 feet from the west property boundary.

1.1.2.2 Description of Threat

The Site is an abandoned industrial rug cleaner that operated from 1910-1975. Previous site investigation activities have identified volatile organic compounds (VOC) in soil and groundwater. The Indiana Department of Environmental Management (IDEM) and the City of Indianapolis referred the Site to the United States Environmental Protection Agency (U.S. EPA) for a site assessment and possible removal activities.

1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

On October 11, 2010, U.S. EPA and its Superfund Technical Assessment and Response Team (START) contractor conducted a site assessment to determine the need for a removal action. During the assessment, approximately 25 55-gallon drums and hundreds of small containers (5 gallons or less) were documented on-site. Many of the drums and containers could not be identified by labels. However, several drums and containers were labeled as containing sodium hydroxide, sodium hypochlorite, ammonia, and other hazardous substances. Field screening and hazcatting indicated that many of the materials met Resource Conservation and Recovery Act (RCRA) criteria for characteristic hazardous waste including ignitability and corrosivity. It was also documented that the Site was open and trespassing appeared to be a common occurrence. As such, EPA's On-Scene Coordinator (OSC) determined that there was an immediate threat of fire or explosion and exposure to trespassers and nearby residents from materials in the drums and other containers. U.S. EPA initiated emergency stabilization and removal activities on October 12, 2010.

2. Current Activities

2.1 Operations Section

2.1.1 Narrative

2.1.2 Response Actions to Date

On October 13, 2010, U.S. EPA, the Emergency and Rapid Response Service (ERRS), and START contractors conducted the following activities:

- Staged and segregated drums and other small containers;
- Conducted air monitoring and documentation;
- Secured and boarded-up staging area pending disposal; and
- Continued security while off-Site until materials can be properly disposed.

2.1.3 Enforcement Activities, Identity of Potentially Responsible Parties (PRPs)

Identification of a PRP and enforcement activities are on-going.

2.1.4 Progress Metrics

<i>Waste Stream</i>	<i>Medium</i>	<i>Quantity</i>	<i>Manifest #</i>	<i>Treatment</i>	<i>Disposal</i>
Pending					

2.2 Planning Section

2.2.1 Anticipated Activities

2.2.1.1 Planned Response Activities

During the next reporting period, U.S. EPA will conduct the following activities:

- Conduct sampling for disposal profiles;
- Continue security until the drums are removed from the Site; and
- Properly dispose of drums and other containers.

2.2.1.2 Next Steps

U.S. EPA will continue emergency removal activities to include disposal of the drums and other containers. The OSC will evaluate the need for a time-critical removal action for soil and hazardous substances contained in underground storage tanks (UST) based on the analytical results from the Site Assessment.

2.2.2 Issues

The Site is located in a high crime area of Indianapolis. As such, security will be maintained until the drums are removed and the Site is stabilized.

2.3 Logistics Section

Not applicable (NA)

2.4 Finance Section

2.4.1 Narrative

Emergency Response Branch (ERB) 1 Chief Jason El-Zein verbally authorized funding of \$50,000 on October 12, 2010.

2.5 Other Command Staff

2.5.1 Safety Officer

OSC Shelly Lam will be the Safety Officer for emergency removal actions.

2.6 Liaison Officer

NA

2.7 Information Officer

2.7.1 Public Information Officer

NA

2.7.2 Community Involvement Coordinator

NA

3. Participating Entities

3.1 Unified Command

NA

3.2 Cooperating Agencies

IDEM

City of Indianapolis

SEND

4. Personnel On Site

1 OSC
5 ERRS
1 START

5. Definition of Terms

ERB	Emergency Response Branch
ERRS	Emergency and Rapid Response Services
IDEM	Indiana Department of Environmental Management
NA	Not Applicable
OSC	On-Scene Coordinator
POLREP	Pollution Report
RCRA	Resource Conservation and Recovery Act
RM	Response Manager
START	Superfund Technical Assessment and Response Team
U.S. EPA	United States Environmental Protection Agency
UST	Underground Storage Tank
VOC	Volatile Organic Compounds

6. Additional sources of information

6.1 Internet location of additional information/report

For additional information, refer to www.epaosc.org/crownlaundry.

6.2 Reporting Schedule

The next POLREP will be submitted when disposal is complete.

7. Situational Reference Materials

NA

U.S. ENVIRONMENTAL PROTECTION AGENCY
POLLUTION/SITUATION REPORT
Crown Laundry - Removal Polrep



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region V

Subject: POLREP #3
Final Emergency Removal POLREP
Crown Laundry
B5YW
Indianapolis, IN
Latitude: 39.7683040 Longitude: -86.1148780

To:

From: Shelly Lam, On-Scene Coordinator

Date: 10/21/2010

Reporting Period: October 14 - 22, 2010

1. Introduction

1.1 Background

Site Number:	B5YW	Contract Number:	
D.O. Number:	65	Action Memo Date:	
Response Authority:	CERCLA	Response Type:	Emergency
Response Lead:	EPA	Incident Category:	Removal Action
NPL Status:	Non NPL	Operable Unit:	
Mobilization Date:	10/12/2010	Start Date:	10/12/2010
Demob Date:	10/22/2010	Completion Date:	10/22/2010
CERCLIS ID:	INN000510503	RCRIS ID:	INR000128884
ERNS No.:		State Notification:	
FPN#:		Reimbursable Account #:	

1.1.1 Incident Category

CERCLA Incident Category - Inactive Production Facility

1.1.2 Site Description

1.1.2.1 Location

The Crown Laundry Site is located at 2913 East Washington Street in Indianapolis, Marion County, Indiana, 46201. The geographical coordinates for the Site are Latitude 39.768304° North and Longitude 86.114878° West. The Site is approximately 2.7 acres in size, and contains two commercial/industrial buildings. The Site is located in a residential and commercial area of Indianapolis, approximately 1.5 miles east of the downtown area. Over 23,000 people live within 1 mile of the Site. Residences are located adjacent to the

southern property boundary and 60 feet from the west property boundary.

1.1.2.2 Description of Threat

The Site is an abandoned industrial rug cleaner that operated from 1910-1975. Previous site investigation activities have identified volatile organic compounds (VOC) in soil and groundwater. The Indiana Department of Environmental Management (IDEM) and the City of Indianapolis referred the Site to the United States Environmental Protection Agency (U.S. EPA) for a site assessment and possible removal activities.

1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

On October 11, 2010, U.S. EPA and its Superfund Technical Assessment and Response Team (START) contractor conducted a site assessment to determine the need for a removal action. During the assessment, approximately 25 55-gallon drums and hundreds of small containers (5 gallons or less) were documented on-site. Many of the drums and containers could not be identified by labels. However, several drums and containers were labeled as containing sodium hydroxide, sodium hypochlorite, ammonia, and other hazardous substances. Field screening and hazcatting indicated that many of the materials met Resource Conservation and Recovery Act (RCRA) criteria for characteristic hazardous waste including ignitability and corrosivity. It was also documented that the Site was open and trespassing appeared to be a common occurrence. As such, EPA's On-Scene Coordinator (OSC) determined that there was an immediate threat of fire or explosion and exposure to trespassers and nearby residents from materials in the drums and other containers. U.S. EPA initiated emergency stabilization and removal activities on October 12, 2010.

Sampling for disposal indicated that materials in the drums and other containers were RCRA characteristic waste for ignitability (D001), reactivity (D003), cadmium (D006), chromium (D007), lead (D008), benzene (D018), carbon tetrachloride (D019), chloroform (D022), m-cresol (D024), 1,2-dichloroethane (D028), 1,1,-dichloroethene (D029), tetrachloroethene (D039), trichloroethene (D040), and vinyl chloride (D043).

2. Current Activities

2.1 Operations Section

2.1.1 Narrative

2.1.2 Response Actions to Date

During the reporting period, U.S. EPA, the Emergency and Rapid Response Service (ERRS), and START contractors conducted the following activities:

- Transported and disposed of drums and other containers to CERCLA-approved off-site facilities; and
- Continued security while off-Site until materials were properly disposed.

2.1.3 Enforcement Activities, Identity of Potentially Responsible Parties (PRPs)

Identification of a PRP and enforcement activities are on-going.

2.1.4 Progress Metrics

<>

Waste Stream	Medium	Quantity	Manifest #	Treatment	Disposal
Hazardous Waste Solid (Tetrachlorethene and Lead)	Solid	1 55-gallon drum	007771403 JJK	NA	EQ Detroit (EPA ID #MID980991566)
Fire Extinguisher	Gas	1 cylinder	007771403 JJK	NA	EQ Detroit

Hazardous Waste Liquid (Lead and vinyl chloride sludge)	Liquid	6 55-gallon drums	007771403 JJK	NA	EQ Detroit
Flammable liquids (Benzene and ethylbenzene)	Liquid	13 55-gallon drums	007771403 JJK	NA	EQ Detroit
Acetylene	Gas	1 cylinder	007771854 JJK	NA	EQ Detroit
Waste Aerosols	Gas	1 55-gallon drum	007771854 JJK	NA	EQ Detroit
Concrete Grout	Solid	1 55-gallon drum	007771406 JJK	NA	EQ Detroit
1,1,1,2-Tetrafluoroethane	Gas	3 cylinders	007771854 JJK	NA	EQ Detroit
Ammonia	Liquid	1 gallon	007771854 JJK	NA	EQ Detroit
Waste Corrosive Liquid (Scale Remover with Hydrochloric Acid)	Liquid	1 gallon	007771854 JJK	NA	EQ Detroit
Waste Corrosive Liquid (Acetic Acid)	Liquid	1/2 gallon	007771854 JJK	NA	EQ Detroit
Waste Corrosive Liquid (Oxalic Acid)	Liquid	1 pint	007771854 JJK	NA	EQ Detroit
Waste Toxic Liquid Organic (Home Insect Control with Tralomethrin)	Liquid	1 gallon	007771854 JJK	NA	EQ Detroit
Waste Toxic Liquid Organic (Weed & Grass Killer with glyphosate isopropylamine)	Liquid	1 gallon	007771854 JJK	NA	EQ Detroit
Waste Toxic Liquid Organic (Flea & Tick Killer with Pyrethrin)	Liquid	1 gallon	007771854 JJK	NA	EQ Detroit

Waste Toxic Liquid Organic (Vibra Tite with 1,1,1-Trichloroethane)	Liquid	3 25 milliliters	007771854 JJK	NA	EQ Detroit
Non-Regulated Material (Latex Paint)	Liquid	600 pounds	007771406 JJK	NA	EQ Detroit
Universal Waste (including batteries and fluorescent light bulbs)	Solid	326 pounds	007771404 JJK	NA	EQ Detroit
Compressed Nitrogen	Gas	1 cylinder	007771854 JJK	NA	EQ Detroit
Flammable Waste Paint	Liquid	1 cubic yard	007771854 JJK	NA	EQ Detroit
Empty Drums	NA	5 55-gallon drums	007771406 JJK	NA	EQ Detroit
Propane Cylinders	Gas	3 cylinders	007771861 JJK	NA	EQ Detroit Transfer Facility
Non-Regulated Liquid	Liquid	1 55-gallon drum	007771403 JJK	NA	EQ Detroit
Tires	Solid	45 cubic yards	Pending	NA	CGS

2.2 Planning Section

2.2.1 Anticipated Activities

2.2.1.1 Planned Response Activities

No additional response activities are planned at this time.

2.2.1.2 Next Steps

The OSC will evaluate the need for a time-critical removal action for soil and hazardous substances contained in underground storage tanks (UST) based on the analytical results from the Site Assessment.

2.2.2 Issues

The Site is located in a high crime area of Indianapolis. The security firm requested to have two guards on-site at night because of nearby gang activity.

2.3 Logistics Section

Not applicable (NA)

2.4 Finance Section

2.4.1 Narrative

Emergency Response Branch (ERB) 1 Chief Jason El-Zein verbally authorized funding of \$50,000 on October 12, 2010. Costs are current through October 21st.

2.5 Other Command Staff

2.5.1 Safety Officer

OSC Shelly Lam was the Safety Officer for emergency removal actions.

2.6 Liaison Officer

NA

2.7 Information Officer

2.7.1 Public Information Officer

NA

2.7.2 Community Involvement Coordinator

NA

3. Participating Entities

3.1 Unified Command

NA

3.2 Cooperating Agencies

IDEM

City of Indianapolis

SEND

4. Personnel On Site

1 OSC

1 ERRS

1 START

2 ERRS subcontractors (EQ)

5. Definition of Terms

ERB	Emergency Response Branch
ERRS	Emergency and Rapid Response Services
IDEM	Indiana Department of Environmental Management
NA	Not Applicable
OSC	On-Scene Coordinator
POLREP	Pollution Report
RCRA	Resource Conservation and Recovery Act
RM	Response Manager
START	Superfund Technical Assessment and Response Team
U.S. EPA	United States Environmental Protection Agency
UST	Underground Storage Tank
VOC	Volatile Organic Compounds

6. Additional sources of information

6.1 Internet location of additional information/report

For additional information, refer to www.epaosc.org/crownlaundry.

6.2 Reporting Schedule

It is not anticipated that additional POLREPs will be submitted for emergency removal activities.

7. Situational Reference Materials

NA

U.S. ENVIRONMENTAL PROTECTION AGENCY
POLLUTION/SITUATION REPORT
Crown Laundry - Removal Polrep
Initial Removal Polrep



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region V

Subject: POLREP #4
Initial Removal POLREP
Crown Laundry
B5YW
Indianapolis, IN
Latitude: 39.7683040 Longitude: -86.1148780

To:
From: Shelly Lam, On-Scene Coordinator
Date: 3/7/2011
Reporting Period: February 21 - April 8, 2011

1. Introduction

1.1 Background

Site Number:	B5YW	Contract Number:	EP-S5-08-02
D.O. Number:	65	Action Memo Date:	12/17/2010
Response Authority:	CERCLA	Response Type:	Time-Critical
Response Lead:	EPA	Incident Category:	Removal Action
NPL Status:	Non NPL	Operable Unit:	
Mobilization Date:	4/4/2011	Start Date:	4/4/2011
Demob Date:		Completion Date:	
CERCLIS ID:	INN000510503	RCRIS ID:	INR000128884
ERNS No.:		State Notification:	
FPN#:		Reimbursable Account #:	

1.1.1 Incident Category

CERCLA Incident Category - Inactive Production Facility

1.1.2 Site Description

1.1.2.1 Location

The Crown Laundry Site is located at 2913 East Washington Street in Indianapolis, Marion County, Indiana, 46201. The geographical coordinates for the Site are Latitude 39.768304° North and Longitude 86.114878° West. The Site is approximately 2.7 acres in size, and contained two commercial/industrial buildings previously used for dry cleaning operations. Crown Laundry is located in a residential and commercial area

of Indianapolis, approximately 1.5 miles east of the downtown area. Over 23,000 people live within 1 mile of the Site. Residences are located adjacent to the southern property boundary and 60 feet from the west property boundary.

1.1.2.2 Description of Threat

The Site is an abandoned industrial rug cleaner that operated from 1910-1975. Previous site investigation activities have identified volatile organic compounds (VOC) in soil and groundwater. The Indiana Department of Environmental Management (IDEM) and the City of Indianapolis referred the Site to the United States Environmental Protection Agency (EPA) for a site assessment and possible removal activities.

1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

On October 11, 2010, U.S. EPA and its Superfund Technical Assessment and Response Team (START) contractor conducted a site assessment to determine the need for a removal action. During the assessment, approximately 25 55-gallon drums and hundreds of small containers (5 gallons or less) were documented on-site. Many of the drums and containers could not be identified by labels. However, several drums and containers were labeled as containing sodium hydroxide, sodium hypochlorite, ammonia, and other hazardous substances. Field screening and hazcatting indicated that many of the materials met Resource Conservation and Recovery Act (RCRA) criteria for characteristic hazardous waste including ignitability and corrosivity. It was also documented that the Site was open and trespassing appeared to be a common occurrence. As such, EPA's On-Scene Coordinator (OSC) determined that there was an immediate threat of fire or explosion and exposure to trespassers and nearby residents from materials in the drums and other containers. EPA conducted emergency stabilization and removal activities October 12-22, 2010. Emergency Pollution Reports (PolRep) 1-3 document emergency removal activities.

Based on the results of the Site Assessment, EPA is conducting a time-critical removal action. The scope of the action includes: conducting removal of underground storage tanks (UST) to include solvent contents; excavating impacted soil that may be source material for vapor intrusion (VI); performing sampling and analysis to determine extent of contamination in soil; performing sampling and analysis to determine disposal options; assessing nearby residential properties for VI which may require the installation of vapor mitigation systems where action levels are exceeded; conducting post-installation proficiency sampling in accordance with the Region 5 VI guidance; transporting and disposing off-site any hazardous substances, pollutants and contaminants at an approved disposal facility in accordance with EPA's Off-Site Rule.

Analytical results from sub-slab sampling indicated that several chemicals of concern (COC) exceeded the chronic screening level established by the Agency for Toxic Substances and Disease Registry (ATSDR). As such, EPA is collecting indoor air samples at those properties.

2. Current Activities

2.1 Operations Section

2.1.1 Narrative

The site is former industrial dry cleaner located in Indianapolis, Indiana. During the Site Assessment, EPA documented USTs containing dry cleaning solvents and soil contamination that could be a source for vapor intrusion.

2.1.2 Response Actions to Date

During the reporting period, U.S. EPA, the Emergency and Rapid Response Service (ERRS), and START contractors conducted the following activities:

- Mobilized field crews on April 4th;
- Established site security including fence installation and on-site command post;
- Vapor intrusion sampling in 8 nearby residential properties;
- Extent of contamination survey in soil;
- Uncovering of USTs and soil excavation;
- Disposal profile sampling.

2.1.3 Enforcement Activities, Identity of Potentially Responsible Parties (PRPs)

Information on the PRP is in the site file.

2.1.4 Progress Metrics

<i>Waste Stream</i>	<i>Medium</i>	<i>Quantity</i>	<i>Manifest #</i>	<i>Treatment</i>	<i>Disposal</i>
Pending					

2.2 Planning Section

2.2.1 Anticipated Activities

2.2.1.1 Planned Response Activities

During the next reporting period, EPA will conduct the following activities:

- Excavation of USTs, including solvent contents;
- Soil excavation;
- Air monitoring; and
- Community meeting.

2.2.1.2 Next Steps

Pending the analytical results of indoor air samples, vapor mitigation systems may need to be installed in residential properties.

2.2.2 Issues

None.

2.3 Logistics Section

Not applicable (NA)

2.4 Finance Section

2.4.1 Narrative

Costs for ERRS are current through April 7th and include costs from the emergency response action. START costs are current through April 1st.

2.5 Other Command Staff

2.5.1 Safety Officer

OSC Shelly Lam is the overall Safety Officer for removal activities. ERRS also has a Safety Officer who monitors site activities and conducts daily safety briefings.

2.6 Liaison Officer

NA

2.7 Information Officer

2.7.1 Public Information Officer

Jayna Legg from the Office of Public Affairs is the Public Information Officer for the Site. She will coordinate media inquiries.

2.7.2 Community Involvement Coordinator

Megan McSeveney, the Community Involvement Coordinator, has been working with nearby residents to gain access for VI sampling and has tentatively scheduled a community meeting for April 14th.

3. Participating Entities

3.1 Unified Command

NA

3.2 Cooperating Agencies

IDEM

City of Indianapolis

SEND

Marion County Public Health Department

Indiana Finance Authority

4. Personnel On Site

1 OSC

5 ERRS

2 START

2 ERRS subcontractors (Axis)

5. Definition of Terms

ATSDR	Agency for Toxic Substances and Disease Registry
COC	Chemicals of Concern
EPA	Environmental Protection Agency
ERRS	Emergency and Rapid Response Services
IDEM	Indiana Department of Environmental Management
NA	Not Applicable
OSC	On-Scene Coordinator
POLREP	Pollution Report
PRP	Potentially Responsible Party
RCRA	Resource Conservation and Recovery Act
START	Superfund Technical Assessment and Response Team
UST	Underground Storage Tank
VI	Vapor Intrusion
VOC	Volatile Organic Compounds

6. Additional sources of information

6.1 Internet location of additional information/report

For additional information, refer to www.epaosc.org/crownlaundry.

6.2 Reporting Schedule

PolReps will be submitted on a weekly or bi-weekly schedule.

7. Situational Reference Materials

NA

U.S. ENVIRONMENTAL PROTECTION AGENCY
POLLUTION/SITUATION REPORT
Crown Laundry - Removal Polrep



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region V

Subject: POLREP #5
Progress PolRep
Crown Laundry
B5YW
Indianapolis, IN
Latitude: 39.7683040 Longitude: -86.1148780

To:
From: Shelly Lam, On-Scene Coordinator
Date: 4/15/2011
Reporting Period: April 11 - 15, 2011

1. Introduction

1.1 Background

Site Number:	B5YW	Contract Number:	EP-S5-08-02
D.O. Number:	65	Action Memo Date:	12/17/2010
Response Authority:	CERCLA	Response Type:	Time-Critical
Response Lead:	EPA	Incident Category:	Removal Action
NPL Status:	Non NPL	Operable Unit:	
Mobilization Date:	4/4/2011	Start Date:	4/4/2011
Demob Date:		Completion Date:	
CERCLIS ID:	INN000510503	RCRIS ID:	INR000128884
ERNS No.:		State Notification:	
FPN#:		Reimbursable Account #:	

1.1.1 Incident Category

CERCLA Incident Category - Inactive Production Facility

1.1.2 Site Description

1.1.2.1 Location

The Crown Laundry Site is located at 2913 East Washington Street in Indianapolis, Marion County, Indiana, 46201. The geographical coordinates for the Site are Latitude 39.768304° North and Longitude 86.114878° West. The Site is approximately 2.7 acres in size, and contained two commercial/industrial buildings previously used for dry cleaning operations. Crown Laundry is located in a residential and commercial area of Indianapolis, approximately 1.5 miles east of the downtown area. Over 23,000 people live within 1 mile of

the Site. Residences are located adjacent to the southern property boundary and 60 feet from the west property boundary.

1.1.2.2 Description of Threat

The Site is an abandoned industrial rug cleaner that operated from 1910-1975. Previous site investigation activities have identified volatile organic compounds (VOC) in soil and groundwater. The Indiana Department of Environmental Management (IDEM) and the City of Indianapolis referred the Site to the United States Environmental Protection Agency (EPA) for a site assessment and possible removal activities.

1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

On October 11, 2010, U.S. EPA and its Superfund Technical Assessment and Response Team (START) contractor conducted a site assessment to determine the need for a removal action. During the assessment, approximately 25 55-gallon drums and hundreds of small containers (5 gallons or less) were documented on-site. Many of the drums and containers could not be identified by labels. However, several drums and containers were labeled as containing sodium hydroxide, sodium hypochlorite, ammonia, and other hazardous substances. Field screening and hazcatting indicated that many of the materials met Resource Conservation and Recovery Act (RCRA) criteria for characteristic hazardous waste including ignitability and corrosivity. It was also documented that the Site was open and trespassing appeared to be a common occurrence. As such, EPA's On-Scene Coordinator (OSC) determined that there was an immediate threat of fire or explosion and exposure to trespassers and nearby residents from materials in the drums and other containers. EPA conducted emergency stabilization and removal activities October 12-22, 2010. Emergency Pollution Reports (PolRep) 1-3 document emergency removal activities.

Based on the results of the Site Assessment, EPA is conducting a time-critical removal action. The scope of the action includes: conducting removal of underground storage tanks (UST) to include solvent contents; excavating impacted soil that may be source material for vapor intrusion (VI); performing sampling and analysis to determine extent of contamination in soil; performing sampling and analysis to determine disposal options; assessing nearby residential properties for VI which may require the installation of vapor mitigation systems where action levels are exceeded; conducting post-installation proficiency sampling in accordance with the Region 5 VI guidance; transporting and disposing off-site any hazardous substances, pollutants and contaminants at an approved disposal facility in accordance with EPA's Off-Site Rule.

Analytical results from sub-slab sampling indicated that several chemicals of concern (COC) exceeded the chronic screening level established by the Agency for Toxic Substances and Disease Registry (ATSDR). As such, EPA is collecting indoor air samples at those properties.

2. Current Activities

2.1 Operations Section

2.1.1 Narrative

The site is former industrial dry cleaner located in Indianapolis, Indiana. During the Site Assessment, EPA documented USTs containing dry cleaning solvents and soil contamination that could be a source for vapor intrusion.

2.1.2 Response Actions to Date

During the reporting period, U.S. EPA, the Emergency and Rapid Response Service (ERRS), and START contractors conducted the following activities:

- Pumped wastewater from vault and shipped off-site for disposal;
- Discovered additional USTs (current count is 11);
- Sampled additional USTs for disposal;
- Exposed and removed five (5) USTs;
- Overexcavated contaminated soil in UST pit;
- Stockpiled and covered soil prior to disposal;
- Bulk tank solvents and staged in frac tank on-site prior to disposal;

- Conducted air monitoring;
- Maintained site security.

2.1.3 Enforcement Activities, Identity of Potentially Responsible Parties (PRPs)

Information on the PRP is in the site file.

2.1.4 Progress Metrics

<i>Waste Stream</i>	<i>Medium</i>	<i>Quantity</i>	<i>Manifest #</i>	<i>Treatment</i>	<i>Disposal</i>
Non-hazardous wastewater	Liquid	4620 gallons	41311	NA	Clean Waters, Dayton, Ohio

2.2 Planning Section

2.2.1 Anticipated Activities

2.2.1.1 Planned Response Activities

During the next reporting period, EPA will conduct the following activities:

- Excavation and cleaning of USTs;
- Soil excavation;
- Geophysical survey and exploratory excavation for additional USTs;
- Vapor intrusion sampling;
- Soil and solvent disposal;
- Air monitoring; and
- Site security.

2.2.1.2 Next Steps

Pending the analytical results of indoor air samples, vapor mitigation systems may need to be installed in residential properties.

2.2.2 Issues

None.

2.3 Logistics Section

Not applicable (NA)

2.4 Finance Section

2.4.1 Narrative

Costs for ERRS are current through April 14th and include costs from the emergency response action. START costs are current through April 11th.

2.5 Other Command Staff

2.5.1 Safety Officer

OSC Shelly Lam is the overall Safety Officer for removal activities. ERRS also has a Safety Officer who monitors site activities and conducts daily safety briefings.

2.6 Liaison Officer

NA

2.7 Information Officer

2.7.1 Public Information Officer

Jayna Legg and Mick Hans from the Office of Public Affairs (OPA) are the Public Information Officers for the Site. OPA issued a press release on April 11th. Two television stations (WISH 8 and Fox 59) interviewed OSC Lam and covered a community meeting on April 14th. Links to the news reports are posted at www.epaosc.org.

2.7.2 Community Involvement Coordinator

Megan McSeveney, the Community Involvement Coordinator, has been working with nearby residents to gain access for VI sampling and scheduled a community meeting on April 14th. The community meeting was well attended by nearby residents, two media crews, a member of Congressman Carson's office, and representatives from SEND, City of Indianapolis, Marion County Health Department, IDEM, IFA, and ATSDR. The tone of the meeting was informal and cordial and EPA was thanked for its presence for more than one member of the community.

3. Participating Entities

3.1 Unified Command

NA

3.2 Cooperating Agencies

IDEM

City of Indianapolis

SEND

Marion County Public Health Department

Indiana Finance Authority

4. Personnel On Site

1 OSC

6 ERRS

1 START

5. Definition of Terms

ATSDR	Agency for Toxic Substances and Disease Registry
COC	Chemicals of Concern
EPA	Environmental Protection Agency
ERRS	Emergency and Rapid Response Services

IDEM	Indiana Department of Environmental Management
IFA	Indiana Finance Authority
NA	Not Applicable
OSC	On-Scene Coordinator
POLREP	Pollution Report
PRP	Potentially Responsible Party
RCRA	Resource Conservation and Recovery Act
START	Superfund Technical Assessment and Response Team
UST	Underground Storage Tank
VI	Vapor Intrusion
VOC	Volatile Organic Compounds

6. Additional sources of information

6.1 Internet location of additional information/report

For additional information, refer to www.epaosc.org/crownlaundry.

6.2 Reporting Schedule

PolReps will be submitted on a weekly or bi-weekly schedule.

7. Situational Reference Materials

NA

U.S. ENVIRONMENTAL PROTECTION AGENCY
POLLUTION/SITUATION REPORT
Crown Laundry - Removal Polrep



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region V

Subject: POLREP #6
Progress PolRep
Crown Laundry
B5YW
Indianapolis, IN
Latitude: 39.7683040 Longitude: -86.1148780

To:
From: Shelly Lam, On-Scene Coordinator
Date: 4/22/2011
Reporting Period: April 18-22, 2011

1. Introduction

1.1 Background

Site Number:	B5YW	Contract Number:	EP-S5-08-02
D.O. Number:	65	Action Memo Date:	12/17/2010
Response Authority:	CERCLA	Response Type:	Time-Critical
Response Lead:	EPA	Incident Category:	Removal Action
NPL Status:	Non NPL	Operable Unit:	
Mobilization Date:	4/4/2011	Start Date:	4/4/2011
Demob Date:		Completion Date:	
CERCLIS ID:	INN000510503	RCRIS ID:	INR000128884
ERNS No.:		State Notification:	
FPN#:		Reimbursable Account #:	

1.1.1 Incident Category

CERCLA Incident Category - Inactive Production Facility

1.1.2 Site Description

1.1.2.1 Location

The Crown Laundry Site is located at 2913 East Washington Street in Indianapolis, Marion County, Indiana, 46201. The geographical coordinates for the Site are Latitude 39.768304° North and Longitude 86.114878° West. The Site is approximately 2.7 acres in size, and contained two commercial/industrial buildings previously used for dry cleaning operations. Crown Laundry is located in a residential and commercial area of Indianapolis, approximately 1.5 miles east of the downtown area. Over 23,000 people live within 1 mile of

the Site. Residences are located adjacent to the southern property boundary and 60 feet from the west property boundary.

1.1.2.2 Description of Threat

The Site is an abandoned industrial rug cleaner that operated from 1910-1975. Previous site investigation activities have identified volatile organic compounds (VOC) in soil and groundwater. The Indiana Department of Environmental Management (IDEM) and the City of Indianapolis referred the Site to the United States Environmental Protection Agency (EPA) for a site assessment and possible removal activities.

1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

On October 11, 2010, U.S. EPA and its Superfund Technical Assessment and Response Team (START) contractor conducted a site assessment to determine the need for a removal action. During the assessment, approximately 25 55-gallon drums and hundreds of small containers (5 gallons or less) were documented on-site. Many of the drums and containers could not be identified by labels. However, several drums and containers were labeled as containing sodium hydroxide, sodium hypochlorite, ammonia, and other hazardous substances. Field screening and hazcatting indicated that many of the materials met Resource Conservation and Recovery Act (RCRA) criteria for characteristic hazardous waste including ignitability and corrosivity. It was also documented that the Site was open and trespassing appeared to be a common occurrence. As such, EPA's On-Scene Coordinator (OSC) determined that there was an immediate threat of fire or explosion and exposure to trespassers and nearby residents from materials in the drums and other containers. EPA conducted emergency stabilization and removal activities October 12-22, 2010. Emergency Pollution Reports (PolRep) 1-3 document emergency removal activities.

Based on the results of the Site Assessment, EPA is conducting a time-critical removal action. The scope of the action includes: conducting removal of underground storage tanks (UST) to include solvent contents; excavating impacted soil that may be source material for vapor intrusion (VI); performing sampling and analysis to determine extent of contamination in soil; performing sampling and analysis to determine disposal options; assessing nearby residential properties for VI which may require the installation of vapor mitigation systems where action levels are exceeded; conducting post-installation proficiency sampling in accordance with the Region 5 VI guidance; transporting and disposing off-site any hazardous substances, pollutants and contaminants at an approved disposal facility in accordance with EPA's Off-Site Rule.

Analytical results from sub-slab sampling indicated that several chemicals of concern (COC) exceeded the chronic screening level established by the Agency for Toxic Substances and Disease Registry (ATSDR). As such, EPA is collecting indoor air samples at those properties.

EPA received analytical results for 28 of 37 soil borings from the extent-of-contamination survey. IDEM identified their Risk Integrated System of Closure (RISC) default closure levels as an Applicable or Relevant and Appropriate Requirement (ARAR). EPA compared the results to the default residential RISC closure levels. Samples from soil borings S04, S12, S19, S22, and S23 contained COCs above the closure levels. These COCs included benzene, tetrachloroethene (PCE); trichloroethene (TCE); 1,1-dichloroethene (DCE); cis-1,2,-DCE; and vinyl chloride.

2. Current Activities

2.1 Operations Section

2.1.1 Narrative

The site is former industrial dry cleaner located in Indianapolis, Indiana. During the Site Assessment, EPA documented USTs containing dry cleaning solvents and soil contamination that could be a source for vapor intrusion.

2.1.2 Response Actions to Date

During the reporting period, U.S. EPA, the Emergency and Rapid Response Service (ERRS), and START contractors conducted the following activities:

- Discovered additional USTs (current count is 13);
- Sampled additional USTs for disposal;
- Exposed and removed 11 of 13 USTs;
- Overexcavated contaminated soil in UST pits;
- Stockpiled and covered soil prior to disposal;
- Bulked tank solvents and staged in frac tank on-site prior to disposal;
- Inerted and opened 4 tanks for cleaning;
- Conducted air monitoring;
- Sampled two properties for sub-slab and indoor air;
- Conducted exploratory excavation; and
- Maintained site security.

The table below provides information on the USTs:

Tank ID	Contents	Size (gallons)
1	Stoddard solvent	8,000
2	Water	500
3	Empty	90
4	Toluene, ethylbenzene, xylenes, 1,1,1,-trichloroethane, cis-1,2-DCE	850
5	Stoddard solvent	1,100
6	Stoddard solvent	500
7	PCE, xylenes	500
8	Xylenes	850
9	Water/oil	5,000
10	Empty	3,300
11	Unknown	1,900
12	Empty	5,000
13	Unknown	5,000

Green Measures:

The following is a summary of green measures implemented to date on-site:

- Used 500 gallons of biodiesel
- Recycled plastic, paper, aluminum, glass, batteries, and printer cartridges.

2.1.3 Enforcement Activities, Identity of Potentially Responsible Parties (PRPs)

Information on the PRP is in the site file.

2.1.4 Progress Metrics

<i>Waste Stream</i>	<i>Medium</i>	<i>Quantity</i>	<i>Manifest #</i>	<i>Treatment</i>	<i>Disposal</i>
Non-hazardous wastewater	Liquid	4620 gallons	41311	NA	Clean Waters, Dayton, Ohio

2.2 Planning Section

2.2.1 Anticipated Activities

2.2.1.1 Planned Response Activities

During the next reporting period, EPA will conduct the following activities:

- Excavation and cleaning of USTs;
- Soil excavation;
- Geophysical survey and exploratory excavation for additional USTs;
- Vapor intrusion sampling;
- Soil and solvent disposal;
- Air monitoring; and
- Site security.

2.2.1.2 Next Steps

Pending the analytical results of indoor air samples, vapor mitigation systems may need to be installed in residential properties.

2.2.2 Issues

None.

2.3 Logistics Section

Not applicable (NA)

2.4 Finance Section

2.4.1 Narrative

Costs for ERRS are current through April 21st and include costs from the emergency response action. START costs are current through April 11th.

2.5 Other Command Staff

2.5.1 Safety Officer

OSC Shelly Lam is the overall Safety Officer for removal activities. ERRS also has a Safety Officer who monitors site activities and conducts daily safety briefings.

2.6 Liaison Officer

NA

2.7 Information Officer

2.7.1 Public Information Officer

Jayna Legg and Mick Hans from the Office of Public Affairs (OPA) are the Public Information Officers for the

Site. OPA issued a press release on April 11th. Two television stations (WISH 8 and Fox 59) interviewed OSC Lam and covered a community meeting on April 14th. Links to the news reports are posted at www.epaosc.org.

2.7.2 Community Involvement Coordinator

Megan McSeveney, the Community Involvement Coordinator, has been working with nearby residents to gain access for VI sampling and scheduled a community meeting on April 14th. The community meeting was well attended by nearby residents, two media crews, a member of Congressman Carson's office, and representatives from SEND, City of Indianapolis, Marion County Health Department, IDEM, IFA, and ATSDR.

3. Participating Entities

3.1 Unified Command

NA

3.2 Cooperating Agencies

IDEM

City of Indianapolis

SEND

Marion County Public Health Department

Indiana Finance Authority

4. Personnel On Site

1 OSC

7 ERRS

1 START

5. Definition of Terms

ARAR	Applicable or Relevant and Appropriate Requirements
ATSDR	Agency for Toxic Substances and Disease Registry
COC	Chemicals of Concern
DCE	Dichloroethene
EPA	Environmental Protection Agency
ERRS	Emergency and Rapid Response Services
IDEM	Indiana Department of Environmental Management
IFA	Indiana Finance Authority
NA	Not Applicable
OSC	On-Scene Coordinator
PCE	Tetrachloroethene
POLREP	Pollution Report
PRP	Potentially Responsible Party
RISC	Risk Integrated System of Closure
RCRA	Resource Conservation and Recovery Act
START	Superfund Technical Assessment and Response Team
TCE	Trichloroethene
UST	Underground Storage Tank
VI	Vapor Intrusion
VOC	Volatile Organic Compounds

6. Additional sources of information

6.1 Internet location of additional information/report

For additional information, refer to www.epaosc.org/crownlaundry.

6.2 Reporting Schedule

PolReps will be submitted on a weekly or bi-weekly schedule.

7. Situational Reference Materials

NA

U.S. ENVIRONMENTAL PROTECTION AGENCY
POLLUTION/SITUATION REPORT
Crown Laundry - Removal Polrep



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region V

Subject: POLREP #7
Progress PolRep
Crown Laundry
B5YW
Indianapolis, IN
Latitude: 39.7683040 Longitude: -86.1148780

To:
From: Shelly Lam, On-Scene Coordinator
Date: 4/29/2011
Reporting Period: April 25 - 29, 2011

1. Introduction

1.1 Background

Site Number:	B5YW	Contract Number:	EP-S5-08-02
D.O. Number:	65	Action Memo Date:	12/17/2010
Response Authority:	CERCLA	Response Type:	Time-Critical
Response Lead:	EPA	Incident Category:	Removal Action
NPL Status:	Non NPL	Operable Unit:	
Mobilization Date:	4/4/2011	Start Date:	4/4/2011
Demob Date:		Completion Date:	
CERCLIS ID:	INN000510503	RCRIS ID:	INR000128884
ERNS No.:		State Notification:	
FPN#:		Reimbursable Account #:	

1.1.1 Incident Category

CERCLA Incident Category - Inactive Production Facility

1.1.2 Site Description

1.1.2.1 Location

The Crown Laundry Site is located at 2913 East Washington Street in Indianapolis, Marion County, Indiana, 46201. The geographical coordinates for the Site are Latitude 39.768304° North and Longitude 86.114878° West. The Site is approximately 2.7 acres in size, and contained two commercial/industrial buildings previously used for dry cleaning operations. Crown Laundry is located in a residential and commercial area of Indianapolis, approximately 1.5 miles east of the downtown area. Over 23,000 people live within 1 mile of

the Site. Residences are located adjacent to the southern property boundary and 60 feet from the west property boundary.

1.1.2.2 Description of Threat

The Site is an abandoned industrial rug cleaner that operated from 1910-1975. Previous site investigation activities have identified volatile organic compounds (VOC) in soil and groundwater. The Indiana Department of Environmental Management (IDEM) and the City of Indianapolis referred the Site to the United States Environmental Protection Agency (EPA) for a site assessment and possible removal activities.

1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

On October 11, 2010, U.S. EPA and its Superfund Technical Assessment and Response Team (START) contractor conducted a site assessment to determine the need for a removal action. During the assessment, approximately 25 55-gallon drums and hundreds of small containers (5 gallons or less) were documented on-site. Many of the drums and containers could not be identified by labels. However, several drums and containers were labeled as containing sodium hydroxide, sodium hypochlorite, ammonia, and other hazardous substances. Field screening and hazcatting indicated that many of the materials met Resource Conservation and Recovery Act (RCRA) criteria for characteristic hazardous waste including ignitability and corrosivity. It was also documented that the Site was open and trespassing appeared to be a common occurrence. As such, EPA's On-Scene Coordinator (OSC) determined that there was an immediate threat of fire or explosion and exposure to trespassers and nearby residents from materials in the drums and other containers. EPA conducted emergency stabilization and removal activities October 12-22, 2010. Emergency Pollution Reports (PolRep) 1-3 document emergency removal activities.

Based on the results of the Site Assessment, EPA is conducting a time-critical removal action. The scope of the action includes: conducting removal of underground storage tanks (UST) to include solvent contents; excavating impacted soil that may be source material for vapor intrusion (VI); performing sampling and analysis to determine extent of contamination in soil; performing sampling and analysis to determine disposal options; assessing nearby residential properties for VI which may require the installation of vapor mitigation systems where action levels are exceeded; conducting post-installation proficiency sampling in accordance with the Region 5 VI guidance; transporting and disposing off-site any hazardous substances, pollutants and contaminants at an approved disposal facility in accordance with EPA's Off-Site Rule.

Analytical results from sub-slab sampling indicated that several chemicals of concern (COC) exceeded the chronic screening level established by the Agency for Toxic Substances and Disease Registry (ATSDR). As such, EPA is collecting indoor air samples at those properties.

EPA received analytical results for soil borings from the extent-of-contamination survey. IDEM identified their Risk Integrated System of Closure (RISC) default closure levels as an Applicable or Relevant and Appropriate Requirement (ARAR). EPA compared the results to the default residential RISC closure levels. Samples from soil borings S04, S12, S19, S22, S23, S32, and S33 contained COCs above the closure levels. These COCs included benzene; chloromethane; tetrachloroethene (PCE); trichloroethene (TCE); 1,1-dichloroethene (DCE); cis-1,2,-DCE; and vinyl chloride.

2. Current Activities

2.1 Operations Section

2.1.1 Narrative

The site is former industrial dry cleaner located in Indianapolis, Indiana. During the Site Assessment, EPA documented USTs containing dry cleaning solvents and soil contamination that could be a source for vapor intrusion.

2.1.2 Response Actions to Date

During the reporting period, U.S. EPA, the Emergency and Rapid Response Service (ERRS), and START contractors conducted the following activities:

- Discovered additional USTs (current count is 14);
- Sampled additional UST for disposal;
- Removed all USTs;
- Cut and clean tanks;
- Collected indoor air samples from 2 residences;
- Conducted geophysical survey using an EM-31 ground conductivity meter to locate subsurface anomalies; and
- Maintained site security.

The table below provides information on the USTs:

Tank ID	Contents	Size (gallons)
1	Stoddard solvent	8,000
2	Water	500
3	Empty	90
4	Toluene, ethylbenzene, xylenes, 1,1,1,-trichloroethane, cis-1,2-DCE	850
5	Stoddard solvent	1,100
6	Stoddard solvent	500
7	PCE, xylenes	500
8	Xylenes	850
9	Water/oil	5,000
10	Empty	3,300
11	Oil/water/rocks	1,900
12	Empty	5,000
13	Xylenes	5,000
14		5,000

Green Measures:

The following is a summary of green measures implemented to date on-site:

- Used 500 gallons of biodiesel
- Recycled plastic, paper, aluminum, glass, batteries, and printer cartridges.

2.1.3 Enforcement Activities, Identity of Potentially Responsible Parties (PRPs)

Information on the PRP is in the site file.

2.1.4 Progress Metrics

<i>Waste Stream</i>	<i>Medium</i>	<i>Quantity</i>	<i>Manifest #</i>	<i>Treatment</i>	<i>Disposal</i>
Non-hazardous wastewater	Liquid	4620 gallons	41311	NA	Clean Waters, Dayton, Ohio

2.2 Planning Section

2.2.1 Anticipated Activities

2.2.1.1 Planned Response Activities

During the next reporting period, EPA will conduct the following activities:

- Soil excavation;
- Vapor intrusion sampling;
- Soil and solvent disposal;
- Air monitoring; and
- Site security.

2.2.1.2 Next Steps

Pending the analytical results of indoor air samples, vapor mitigation systems may need to be installed in residential properties.

2.2.2 Issues

Site activities were limited by heavy rain, flooding, and severe weather. Additional water infiltration in residential basements prevented collection of sub-slab samples for the vapor intrusion study.

2.3 Logistics Section

Not applicable (NA)

2.4 Finance Section

2.4.1 Narrative

Costs for ERRS are current through April 21st and include costs from the emergency response action. START costs are current through April 11th.

2.5 Other Command Staff

2.5.1 Safety Officer

OSC Shelly Lam is the overall Safety Officer for removal activities. ERRS also has a Safety Officer who monitors site activities and conducts daily safety briefings.

2.6 Liaison Officer

NA

2.7 Information Officer

2.7.1 Public Information Officer

Jayna Legg and Mick Hans from the Office of Public Affairs (OPA) are the Public Information Officers for the Site. OPA issued a press release on April 11th. Two television stations (WISH 8 and Fox 59) interviewed OSC Lam and covered a community meeting on April 14th. Links to the news reports are posted at www.epaosc.org.

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Megan McSeveney, the Community Involvement Coordinator, has been working with nearby residents to gain access for VI sampling and scheduled a community meeting on April 14th. The community meeting was well attended by nearby residents, two media crews, a member of Congressman Carson's office, and representatives from SEND, City of Indianapolis, Marion County Health Department, IDEM, IFA, and ATSDR.

3. Participating Entities

3.1 Unified Command

NA

3.2 Cooperating Agencies

IDEM

City of Indianapolis

SEND

Marion County Public Health Department

Indiana Finance Authority

4. Personnel On Site

1 OSC

7 ERRS

1 START

5. Definition of Terms

ARAR	Applicable or Relevant and Appropriate Requirements
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IDEM	Indiana Department of Environmental Management
IFA	Indiana Finance Authority
NA	Not Applicable
OSC	On-Scene Coordinator
PCE	Tetrachloroethene
POLREP	Pollution Report
PRP	Potentially Responsible Party
RISC	Risk Integrated System of Closure
RCRA	Resource Conservation and Recovery Act
START	Superfund Technical Assessment and Response Team
TCE	Trichloroethene
UST	Underground Storage Tank
VI	Vapor Intrusion
VOC	Volatile Organic Compounds

6. Additional sources of information

6.1 Internet location of additional information/report

For additional information, refer to www.epaosc.org/crownlaundry.

6.2 Reporting Schedule

PolReps will be submitted on a weekly or bi-weekly schedule.

7. Situational Reference Materials

NA

U.S. ENVIRONMENTAL PROTECTION AGENCY
POLLUTION/SITUATION REPORT
Crown Laundry - Removal Polrep



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region V

Subject: POLREP #8
Progress PolRep
Crown Laundry
B5YW
Indianapolis, IN
Latitude: 39.7683040 Longitude: -86.1148780

To:
From: Shelly Lam, On-Scene Coordinator
Date: 4/29/2011
Reporting Period: April 25-29, 2011

1. Introduction

1.1 Background

Site Number:	B5YW	Contract Number:	EP-S5-08-02
D.O. Number:	65	Action Memo Date:	12/17/2010
Response Authority:	CERCLA	Response Type:	Time-Critical
Response Lead:	EPA	Incident Category:	Removal Action
NPL Status:	Non NPL	Operable Unit:	
Mobilization Date:	4/4/2011	Start Date:	4/4/2011
Demob Date:		Completion Date:	
CERCLIS ID:	INN000510503	RCRIS ID:	INR000128884
ERNS No.:		State Notification:	
FPN#:		Reimbursable Account #:	

1.1.1 Incident Category

CERCLA Incident Category - Inactive Production Facility

1.1.2 Site Description

1.1.2.1 Location

The Crown Laundry Site is located at 2913 East Washington Street in Indianapolis, Marion County, Indiana, 46201. The geographical coordinates for the Site are Latitude 39.768304° North and Longitude 86.114878° West. The Site is approximately 2.7 acres in size, and contained two commercial/industrial buildings previously used for dry cleaning operations. Crown Laundry is located in a residential and commercial area of Indianapolis, approximately 1.5 miles east of the downtown area. Over 23,000 people live within 1 mile of

the Site. Residences are located adjacent to the southern property boundary and 60 feet from the west property boundary.

1.1.2.2 Description of Threat

The Site is an abandoned industrial rug cleaner that operated from 1910-1975. Previous site investigation activities have identified volatile organic compounds (VOC) in soil and groundwater. The Indiana Department of Environmental Management (IDEM) and the City of Indianapolis referred the Site to the United States Environmental Protection Agency (EPA) for a site assessment and possible removal activities.

1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

On October 11, 2010, U.S. EPA and its Superfund Technical Assessment and Response Team (START) contractor conducted a site assessment to determine the need for a removal action. During the assessment, approximately 25 55-gallon drums and hundreds of small containers (5 gallons or less) were documented on-site. Many of the drums and containers could not be identified by labels. However, several drums and containers were labeled as containing sodium hydroxide, sodium hypochlorite, ammonia, and other hazardous substances. Field screening and hazcatting indicated that many of the materials met Resource Conservation and Recovery Act (RCRA) criteria for characteristic hazardous waste including ignitability and corrosivity. It was also documented that the Site was open and trespassing appeared to be a common occurrence. As such, EPA's On-Scene Coordinator (OSC) determined that there was an immediate threat of fire or explosion and exposure to trespassers and nearby residents from materials in the drums and other containers. EPA conducted emergency stabilization and removal activities October 12-22, 2010. Emergency Pollution Reports (PolRep) 1-3 document emergency removal activities.

Based on the results of the Site Assessment, EPA is conducting a time-critical removal action. The scope of the action includes: conducting removal of underground storage tanks (UST) to include solvent contents; excavating impacted soil that may be source material for vapor intrusion (VI); performing sampling and analysis to determine extent of contamination in soil; performing sampling and analysis to determine disposal options; assessing nearby residential properties for VI which may require the installation of vapor mitigation systems where action levels are exceeded; conducting post-installation proficiency sampling in accordance with the Region 5 VI guidance; transporting and disposing off-site any hazardous substances, pollutants and contaminants at an approved disposal facility in accordance with EPA's Off-Site Rule.

Analytical results from sub-slab sampling indicated that several chemicals of concern (COC) exceeded the chronic screening level established by the Agency for Toxic Substances and Disease Registry (ATSDR). As such, EPA collected indoor air samples at those properties.

EPA received analytical results for soil borings from the extent-of-contamination survey. IDEM identified their Risk Integrated System of Closure (RISC) default closure levels as an Applicable or Relevant and Appropriate Requirement (ARAR). EPA compared the results to the default residential RISC closure levels. Samples from soil borings S04, S12, S19, S22, S23, S32, and S33 contained COCs above the closure levels. These COCs included benzene; chloromethane; tetrachloroethene (PCE); trichloroethene (TCE); 1,1-dichloroethene (DCE); cis-1,2,-DCE; and vinyl chloride.

2. Current Activities

2.1 Operations Section

2.1.1 Narrative

The site is former industrial dry cleaner located in Indianapolis, Indiana. During the Site Assessment, EPA documented USTs containing dry cleaning solvents and soil contamination that could be a source for vapor intrusion.

2.1.2 Response Actions to Date

During the reporting period, U.S. EPA, the Emergency and Rapid Response Service (ERRS), and START contractors conducted the following activities:

- Discovered additional USTs (current count is 14);
- Sampled additional UST for disposal;
- Removed all USTs;
- Cut and clean tanks;
- Collected indoor air samples from 2 residences;
- Dewatered tank pits, which were full of rain water; rain water is currently being diverted to a low spot on-site;
- Conducted confined space entry into Tank 1 to clean it;
- Conducted geophysical survey using an EM-31 ground conductivity meter to locate subsurface anomalies; and
- Maintained site security.

The table below provides information on the USTs:

Tank ID	Contents	Size (gallons)
1	Stoddard solvent	8,000
2	Water	500
3	Empty	90
4	Toluene, ethylbenzene, xylenes, 1,1,1,-trichloroethane, cis-1,2-DCE	850
5	Stoddard solvent	1,100
6	Stoddard solvent	500
7	PCE, xylenes	500
8	Xylenes	850
9	Water/oil	5,000
10	Empty	3,300
11	Oil/water/rocks	1,900
12	Empty	5,000
13	Xylenes	5,000
14	Empty	5,000

Green Measures:

The following is a summary of green measures implemented to date on-site:

- Used 1,000 gallons of biodiesel
- Recycled plastic, paper, aluminum, glass, batteries, and printer cartridges.

2.1.3 Enforcement Activities, Identity of Potentially Responsible Parties (PRPs)

Information on the PRP is in the site file.

2.1.4 Progress Metrics

<i>Waste Stream</i>	<i>Medium</i>	<i>Quantity</i>	<i>Manifest #</i>	<i>Treatment</i>	<i>Disposal</i>
Non-hazardous wastewater	Liquid	4620 gallons	41311	NA	Clean Waters, Dayton, Ohio

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2.2 Planning Section

2.2.1 Anticipated Activities

2.2.1.1 Planned Response Activities

During the next reporting period, EPA will conduct the following activities:

- Soil excavation;
- Vapor intrusion sampling;
- Soil and solvent disposal;
- Air monitoring; and
- Site security.

2.2.1.2 Next Steps

Pending the analytical results of indoor air samples, vapor mitigation systems may need to be installed in residential properties.

2.2.2 Issues

Site activities were limited by heavy rain, flooding, and severe weather. Additionally, water infiltration in residential basements prevented collection of sub-slab samples for the vapor intrusion study.

2.3 Logistics Section

Not applicable (NA)

2.4 Finance Section

2.4.1 Narrative

Costs for ERRS are current through April 28th and include costs from the emergency response action. START costs are estimated through April 29th.

2.5 Other Command Staff

2.5.1 Safety Officer

OSC Shelly Lam is the overall Safety Officer for removal activities. ERRS also has a Safety Officer who monitors site activities and conducts daily safety briefings.

2.6 Liaison Officer

NA

2.7 Information Officer

2.7.1 Public Information Officer

Jayna Legg and Mick Hans from the Office of Public Affairs (OPA) are the Public Information Officers for the Site. OPA issued a press release on April 11th. Two television stations (WISH 8 and Fox 59) interviewed OSC Lam and covered a community meeting on April 14th. Links to the news reports are posted at

www.epaosc.org.

2.7.2 Community Involvement Coordinator

Megan McSeveney, the Community Involvement Coordinator, has been working with nearby residents to gain access for VI sampling and scheduled a community meeting on April 14th. The community meeting was well attended by nearby residents, two media crews, a member of Congressman Carson's office, and representatives from SEND, City of Indianapolis, Marion County Health Department, IDEM, IFA, and ATSDR.

3. Participating Entities

3.1 Unified Command

NA

3.2 Cooperating Agencies

IDEM

City of Indianapolis

SEND

Marion County Public Health Department

Indiana Finance Authority

4. Personnel On Site

1 OSC

7 ERRS

1 START

5. Definition of Terms

ARAR	Applicable or Relevant and Appropriate Requirements
ATSDR	Agency for Toxic Substances and Disease Registry
COC	Chemicals of Concern
DCE	Dichloroethene
EPA	Environmental Protection Agency
ERRS	Emergency and Rapid Response Services
IDEM	Indiana Department of Environmental Management
IFA	Indiana Finance Authority
NA	Not Applicable
OSC	On-Scene Coordinator
PCE	Tetrachloroethene
POLREP	Pollution Report
PRP	Potentially Responsible Party
RISC	Risk Integrated System of Closure
RCRA	Resource Conservation and Recovery Act
START	Superfund Technical Assessment and Response Team
TCE	Trichloroethene
UST	Underground Storage Tank
VI	Vapor Intrusion
VOC	Volatile Organic Compounds

6. Additional sources of information

6.1 Internet location of additional information/report

For additional information, refer to www.epaosc.org/crownlaundry.

6.2 Reporting Schedule

PolReps will be submitted on a weekly or bi-weekly schedule.

7. Situational Reference Materials

NA

U.S. ENVIRONMENTAL PROTECTION AGENCY
POLLUTION/SITUATION REPORT
Crown Laundry - Removal Polrep
Final Removal Polrep



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region V

Subject: POLREP #9
Final PolRep
Crown Laundry
B5YW
Indianapolis, IN
Latitude: 39.7683040 Longitude: -86.1148780

To:
From: Shelly Lam, On-Scene Coordinator
Date: 6/2/2011
Reporting Period: May 2 - June 2, 2011

1. Introduction

1.1 Background

Site Number:	B5YW	Contract Number:	EP-S5-08-02
D.O. Number:	65	Action Memo Date:	12/17/2010
Response Authority:	CERCLA	Response Type:	Time-Critical
Response Lead:	EPA	Incident Category:	Removal Action
NPL Status:	Non NPL	Operable Unit:	
Mobilization Date:	4/4/2011	Start Date:	4/4/2011
Demob Date:	5/27/2011	Completion Date:	6/2/2011
CERCLIS ID:	INN000510503	RCRIS ID:	INR000128884
ERNS No.:		State Notification:	
FPN#:		Reimbursable Account #:	

1.1.1 Incident Category

CERCLA Incident Category - Inactive Production Facility

1.1.2 Site Description

1.1.2.1 Location

The Crown Laundry Site is located at 2913 East Washington Street in Indianapolis, Marion County, Indiana, 46201. The geographical coordinates for the Site are Latitude 39.768304° North and Longitude 86.114878° West. The Site is approximately 2.7 acres in size, and contained two commercial/industrial buildings previously used for dry cleaning operations. Crown Laundry is located in a residential and commercial area

of Indianapolis, approximately 1.5 miles east of the downtown area. Over 23,000 people live within 1 mile of the Site. Residences are located adjacent to the southern property boundary and 60 feet from the west property boundary.

1.1.2.2 Description of Threat

The Site was an abandoned industrial rug cleaner that operated from 1910-1975. Previous site investigation activities identified volatile organic compounds (VOC) in soil and groundwater. The Indiana Department of Environmental Management (IDEM) and the City of Indianapolis referred the Site to the United States Environmental Protection Agency (EPA) for a site assessment and possible removal activities.

1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

On October 11, 2010, U.S. EPA and its Superfund Technical Assessment and Response Team (START) contractor conducted a site assessment to determine the need for a removal action. During the assessment, approximately 25 55-gallon drums and hundreds of small containers (5 gallons or less) were documented on-site. Many of the drums and containers could not be identified by labels. However, several drums and containers were labeled as containing sodium hydroxide, sodium hypochlorite, ammonia, and other hazardous substances. Field screening and hazcatting indicated that many of the materials met Resource Conservation and Recovery Act (RCRA) criteria for characteristic hazardous waste including ignitability and corrosivity. It was also documented that the Site was open and trespassing appeared to be a common occurrence. As such, EPA's On-Scene Coordinator (OSC) determined that there was an immediate threat of fire or explosion and exposure to trespassers and nearby residents from materials in the drums and other containers. EPA conducted emergency stabilization and removal activities October 12-22, 2010. Emergency Pollution Reports (PolRep) 1-3 document emergency removal activities.

Based on the results of the Site Assessment, EPA conducted a time-critical removal action. The scope of the action included: conducting removal of underground storage tanks (UST) to include solvent contents; excavating impacted soil that may be source material for vapor intrusion (VI); performing sampling and analysis to determine extent of contamination in soil; performing sampling and analysis to determine disposal options; assessing nearby residential properties for VI which may require the installation of vapor mitigation systems where action levels are exceeded; conducting post-installation proficiency sampling in accordance with the Region 5 VI guidance; transporting and disposing off-site any hazardous substances, pollutants and contaminants at an approved disposal facility in accordance with EPA's Off-Site Rule.

Analytical results from sub-slab sampling indicated that several chemicals of concern (COC) exceeded the chronic screening levels established by the Agency for Toxic Substances and Disease Registry (ATSDR). As such, EPA collected indoor air samples at those properties. Six properties had indoor air concentrations above chronic screening levels. As such, EPA has offered to install vapor mitigation systems at these properties.

EPA received analytical results for soil borings from the extent-of-contamination survey. IDEM identified their Risk Integrated System of Closure (RISC) default closure levels as an Applicable or Relevant and Appropriate Requirement (ARAR). EPA compared the results to the default residential RISC closure levels. Samples from soil borings S04, S12, S19, S22, S23, S32, and S33 contained COCs above the closure levels. These COCs included benzene; chloromethane; tetrachloroethene (PCE); trichloroethene (TCE); 1,1-dichloroethene (DCE); cis-1,2,-DCE; and vinyl chloride.

2. Current Activities

2.1 Operations Section

2.1.1 Narrative

The site is former industrial dry cleaner located in Indianapolis, Indiana. During the Site Assessment, EPA documented USTs containing dry cleaning solvents and soil contamination that could be a source for vapor intrusion.

2.1.2 Response Actions to Date

U.S. EPA, the Emergency and Rapid Response Service (ERRS), and START contractors conducted the

following activities during the reporting period:

- Collected indoor air samples from 5 residences, for a total of 16 residential properties sampled;
- Installed 11 vapor mitigation systems;
- Excavated contaminated soil;
- Collected confirmation samples from the excavation;
- Backfilled excavation;
- Disposed of 9,466.23 tons of soil at Waste Management's Twin Bridges Landfill;
- Shipped 2,300 gallons of solvent to Clean Water in Dayton for reclamation;
- Shipped 6,998 gallons of waste solvent water to PSC; and
- Maintained site security.

The table below provides information on the USTs:

Tank ID	Contents	Size (gallons)
1	Stoddard solvent	8,000
2	Water	500
3	Empty	90
4	Toluene, ethylbenzene, xylenes, 1,1,1,-trichloroethane, cis-1,2-DCE	850
5	Stoddard solvent	1,100
6	Stoddard solvent	500
7	PCE, xylenes	500
8	Xylenes	850
9	Water/oil	5,000
10	Empty	3,300
11	Oil/water/rocks	1,900
12	Empty	5,000
13	Xylenes	5,000
14	Empty	5,000

Green Measures:

The following is a summary of green measures implemented on-site:

- Used approximately 3,700 gallons of biodiesel;
- Recycled plastic, paper, aluminum, glass, batteries, and printer cartridges; and
- Recycled scrap metal.

2.1.3 Enforcement Activities, Identity of Potentially Responsible Parties (PRPs)

Information on the PRP is in the site file.

2.1.4 Progress Metrics

<i>Waste Stream</i>	<i>Medium</i>	<i>Quantity</i>	<i>Manifest #</i>	<i>Treatment</i>	<i>Disposal</i>
Non-hazardous wastewater	Liquid	5,620 gallons	41311	NA	Clean Waters, Dayton, Ohio
		9,466.23			Twin Bridges

Soil	Solid	tons	Various	NA	Landfill, Danville, IN
Solvent	Liquid	2,300 gallons	T13-050211-1	NA	PSC
Solvent water	Liquid	6,998 gallons	008498324JJK 008498323JJK	NA	Clean Water
Scrap metal	Solid	19.99 tons	NA	NA	Omni Source

2.2 Planning Section

2.2.1 Anticipated Activities

2.2.1.1 Planned Response Activities

Over the next year, EPA will conduct proficiency sampling at the residential properties with vapor mitigation systems.

2.2.1.2 Next Steps

EPA has referred the Site to IDEM for cleanup of groundwater contamination.

2.2.2 Issues

None

2.3 Logistics Section

Not applicable (NA)

2.4 Finance Section

2.4.1 Narrative

Costs for ERRS are current through May 26th and include costs from the emergency response action. START costs are current through May 27th.

2.5 Other Command Staff

2.5.1 Safety Officer

OSC Shelly Lam was the overall Safety Officer for removal activities. ERRS had a Safety Officer who monitored site activities and conducted daily safety briefings.

2.6 Liaison Officer

NA

2.7 Information Officer

2.7.1 Public Information Officer

Jayna Legg and Mick Hans from the Office of Public Affairs (OPA) were the Public Information Officers for the Site.

2.7.2 Community Involvement Coordinator

Megan McSeveney, the Community Involvement Coordinator, worked with nearby residents to gain access for VI sampling. She has prepared a fact sheet to send to the community about the cleanup work.

3. Participating Entities

3.1 Unified Command

NA

3.2 Cooperating Agencies

IDEM

City of Indianapolis

SEND

Marion County Public Health Department

Indiana Finance Authority

4. Personnel On Site

1 OSC

7 ERRS

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5. Definition of Terms

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IFA	Indiana Finance Authority
NA	Not Applicable
OSC	On-Scene Coordinator
PCE	Tetrachloroethene
POLREP	Pollution Report
PRP	Potentially Responsible Party
RISC	Risk Integrated System of Closure
RCRA	Resource Conservation and Recovery Act
START	Superfund Technical Assessment and Response Team
TCE	Trichloroethene
UST	Underground Storage Tank
VI	Vapor Intrusion
VOC	Volatile Organic Compounds

6. Additional sources of information

6.1 Internet location of additional information/report

For additional information, refer to www.epaosc.org/crownlaundry.

6.2 Reporting Schedule

No additional PolReps will be submitted.

7. Situational Reference Materials

NA

U.S. ENVIRONMENTAL PROTECTION AGENCY
POLLUTION/SITUATION REPORT
Crown Laundry - Removal Polrep
Final Removal Polrep



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region V

Subject: POLREP #10
Revised Final PolRep
Crown Laundry
B5YW
Indianapolis, IN
Latitude: 39.7683040 Longitude: -86.1148780

To:

From: Shelly Lam, On-Scene Coordinator

Date: 6/29/2011

Reporting Period: June 10 - 23, 2011

1. Introduction

1.1 Background

Site Number:	B5YW	Contract Number:	EP-S5-08-02
D.O. Number:	65	Action Memo Date:	12/17/2010
Response Authority:	CERCLA	Response Type:	Time-Critical
Response Lead:	EPA	Incident Category:	Removal Action
NPL Status:	Non NPL	Operable Unit:	
Mobilization Date:	4/4/2011	Start Date:	4/4/2011
Demob Date:	6/23/2011	Completion Date:	6/23/2011
CERCLIS ID:	INN000510503	RCRIS ID:	INR000128884
ERNS No.:		State Notification:	
FPN#:		Reimbursable Account #:	

1.1.1 Incident Category

CERCLA Incident Category - Inactive Production Facility

1.1.2 Site Description

1.1.2.1 Location

The Crown Laundry Site is located at 2913 East Washington Street in Indianapolis, Marion County, Indiana, 46201. The geographical coordinates for the Site are Latitude 39.768304° North and Longitude 86.114878° West. The Site is approximately 2.7 acres in size, and contained two commercial/industrial buildings previously used for dry cleaning operations. Crown Laundry is located in a residential and commercial area

of Indianapolis, approximately 1.5 miles east of the downtown area. Over 23,000 people live within 1 mile of the Site. Residences are located adjacent to the southern property boundary and 60 feet from the west property boundary.

1.1.2.2 Description of Threat

The Site was an abandoned industrial rug cleaner that operated from 1910-1975. Previous site investigation activities identified volatile organic compounds (VOC) in soil and groundwater. The Indiana Department of Environmental Management (IDEM) and the City of Indianapolis referred the Site to the United States Environmental Protection Agency (EPA) for a site assessment and possible removal activities.

1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

On October 11, 2010, U.S. EPA and its Superfund Technical Assessment and Response Team (START) contractor conducted a site assessment to determine the need for a removal action. During the assessment, approximately 25 55-gallon drums and hundreds of small containers (5 gallons or less) were documented on-site. Many of the drums and containers could not be identified by labels. However, several drums and containers were labeled as containing sodium hydroxide, sodium hypochlorite, ammonia, and other hazardous substances. Field screening and hazcatting indicated that many of the materials met Resource Conservation and Recovery Act (RCRA) criteria for characteristic hazardous waste including ignitability and corrosivity. It was also documented that the Site was open and trespassing appeared to be a common occurrence. As such, EPA's On-Scene Coordinator (OSC) determined that there was an immediate threat of fire or explosion and exposure to trespassers and nearby residents from materials in the drums and other containers. EPA conducted emergency stabilization and removal activities October 12-22, 2010. Emergency Pollution Reports (PolRep) 1-3 document emergency removal activities.

Based on the results of the Site Assessment, EPA conducted a time-critical removal action. The scope of the action included: conducting removal of underground storage tanks (UST) to include solvent contents; excavating impacted soil that may be source material for vapor intrusion (VI); performing sampling and analysis to determine extent of contamination in soil; performing sampling and analysis to determine disposal options; assessing nearby residential properties for VI which may require the installation of vapor mitigation systems where action levels are exceeded; conducting post-installation proficiency sampling in accordance with the Region 5 VI guidance; transporting and disposing off-site any hazardous substances, pollutants and contaminants at an approved disposal facility in accordance with EPA's Off-Site Rule.

Analytical results from sub-slab sampling indicated that several chemicals of concern (COC) exceeded the chronic screening levels established by the Agency for Toxic Substances and Disease Registry (ATSDR). As such, EPA collected indoor air samples at those properties. Six properties had indoor air concentrations above chronic screening levels. As such, EPA has offered to install vapor mitigation systems at these properties.

EPA received analytical results for soil borings from the extent-of-contamination survey. IDEM identified their Risk Integrated System of Closure (RISC) default closure levels as an Applicable or Relevant and Appropriate Requirement (ARAR). EPA compared the results to the default residential RISC closure levels. Samples from soil borings S04, S12, S19, S22, S23, S32, and S33 contained COCs above the closure levels. These COCs included benzene; chloromethane; tetrachloroethene (PCE); trichloroethene (TCE); 1,1-dichloroethene (DCE); cis-1,2,-DCE; and vinyl chloride.

2. Current Activities

2.1 Operations Section

2.1.1 Narrative

The site is former industrial dry cleaner located in Indianapolis, Indiana. During the Site Assessment, EPA documented USTs containing dry cleaning solvents and soil contamination that could be a source for vapor intrusion.

2.1.2 Response Actions to Date

U.S. EPA, the Emergency and Rapid Response Service (ERRS), and START contractors remobilized to the

Site on June 10, 2011 based on analytical results from the excavation. Laboratory analysis indicated that excavation sidewalls and floor contained benzene and chlorinated solvents above RISC Industrial Default Closure Levels. PCE was as high as 58,000 micrograms per kilogram (ug/kg). From June 10th through June 23rd, EPA conducted overexcavation of contaminated soil. Approximately 4,115 additional tons of soil were shipped off-site for disposal. Additionally, EPA collected 30-day post-installation performance sampling at homes with vapor mitigation systems.

Analytical results from the final excavation indicated that contamination had been removed below RISC's industrial default closure levels except at two locations in the groundwater smear zone which could not be over-excavated. EPA completed on-Site activities on June 23, 2011.

2.1.3 Enforcement Activities, Identity of Potentially Responsible Parties (PRPs)

Information on the PRP is in the site file.

2.1.4 Progress Metrics

<i>Waste Stream</i>	<i>Medium</i>	<i>Quantity</i>	<i>Manifest #</i>	<i>Treatment</i>	<i>Disposal</i>
Non-hazardous wastewater	Liquid	5,620 gallons	41311	NA	Clean Waters, Dayton, Ohio
Soil	Solid	13,581.02 tons	Various	NA	Twin Bridges Landfill, Danville, IN
Solvent	Liquid	2,300 gallons	T13-050211-1	NA	PSC
Solvent water	Liquid	6,998 gallons	008498324JJK 008498323JJK	NA	Clean Water
Scrap metal	Solid	19.99 tons	NA	NA	Omni Source

2.2 Planning Section

2.2.1 Anticipated Activities

2.2.1.1 Planned Response Activities

EPA completed on-Site activities on June 23, 2011. Over the next year, EPA will conduct proficiency sampling at off-Site residential properties with vapor mitigation systems.

2.2.1.2 Next Steps

EPA has referred the Site to IDEM for cleanup of groundwater contamination.

2.2.2 Issues

None

2.3 Logistics Section

Not applicable (NA)

2.4 Finance Section

2.4.1 Narrative

Costs for ERRS are current through June 24th and include costs from the emergency response action. START costs are current through June 24th. Final costs are pending.

2.5 Other Command Staff

2.5.1 Safety Officer

OSC Shelly Lam was the overall Safety Officer for removal activities. ERRS had a Safety Officer who monitored site activities and conducted daily safety briefings.

2.6 Liaison Officer

NA

2.7 Information Officer

2.7.1 Public Information Officer

Jayna Legg and Mick Hans from the Office of Public Affairs (OPA) were the Public Information Officers for the Site.

2.7.2 Community Involvement Coordinator

Megan McSeveney, the Community Involvement Coordinator, worked with nearby residents to gain access for VI sampling. She has prepared a fact sheet to send to the community about the cleanup work.

3. Participating Entities

3.1 Unified Command

NA

3.2 Cooperating Agencies

IDEM

City of Indianapolis

SEND

Marion County Public Health Department

Indiana Finance Authority (IFA)

4. Personnel On Site

1 OSC

4 ERRS

1 START

5. Definition of Terms

ARAR Applicable or Relevant and Appropriate Requirements

ATSDR Agency for Toxic Substances and Disease Registry

COC	Chemicals of Concern
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EPA	Environmental Protection Agency
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NA	Not Applicable
OPA	Office of Public Affairs
OSC	On-Scene Coordinator
PCE	Tetrachloroethene
PolRep	Pollution Report
PRP	Potentially Responsible Party
RCRA	Resource Conservation and Recovery Act
RISC	Risk Integrated System of Closure
START	Superfund Technical Assessment and Response Team
TCE	Trichloroethene
ug/kg	micrograms per kilogram
UST	Underground Storage Tank
VI	Vapor Intrusion
VOC	Volatile Organic Compounds

6. Additional sources of information

6.1 Internet location of additional information/report

For additional information, refer to www.epaosc.org/crownlaundry.

6.2 Reporting Schedule

No additional PolReps will be submitted.

7. Situational Reference Materials

NA